

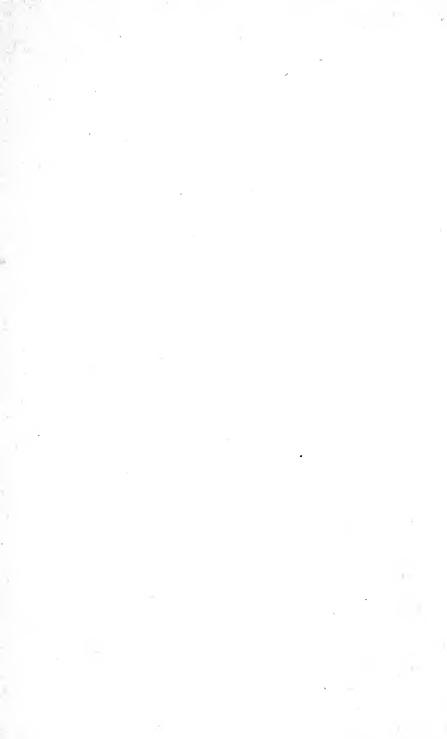
# THE TOURS

## OWNERSHIP OF CALIFORNIA

1 5

-----



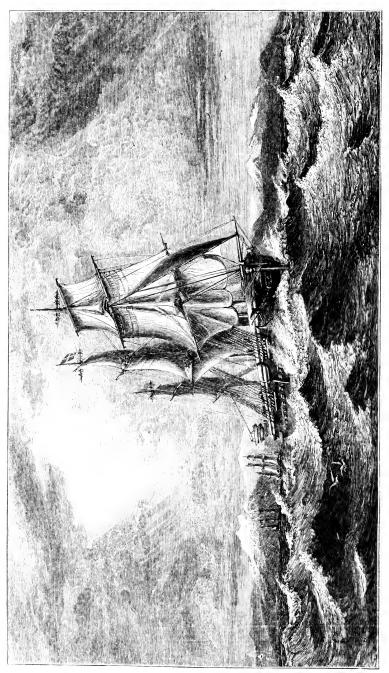


AN Pakkur

JOURNAL IN THE PACIFIC.

LONDON: PRINTED BY
SPOTTISWOODE AND CO., NEW-STREET SQUARE
AND PARLIAMENT STREET





# OUR JOURNAL IN THE PACIFIC.

BY THE

## OFFICERS OF H.M.S. ZEALOUS.

ARRANGED AND EDITED BY

# LIEUTENANT S. EARDLEY-WILMOT.

'Some strange devise I know each youthful wight
Would here expect, of lofty brave assay:
But I'll the simple truth in simple wise convey.'
HENRY MORE.

'You need not fear a surfeit; here is but little, and that light of digestion.'  $$\operatorname{QUARLES}.$$ 

WITH A MAP AND NUMEROUS ILLUSTRATIONS.



LONDON:
LONGMANS, GREEN, AND CO.
1873.

E7

.

#### **DEDICATED**

BY EXPRESS PERMISSION

TO THE

RIGHT HON. GEORGE J. GOSCHEN, M.P.

FIRST LORD OF THE ADMIRALTY.



## PREFACE.

THE Journal of a ship's commission in these times must necessarily be somewhat dry reading, except, perhaps, to people personally interested by having taken a part in the scenes which it describes, and to their friends and relatives.

Therefore, in presenting this book, with great diffidence, to the public, we wish to state that it is published with a further object,—namely, to be useful to any who may happen to visit the same parts of the world either at the call of duty, as in our case, or to those simply following the dictates of free-will and pleasure. So, by entering into the historical, social, and descriptive vein, when speaking of the various countries visited, and also by appending a few remarks concerning winds, currents, harbours, channels, and other facts useful to the navigator, we have striven, as far as in us lay, to combine a little of all qualities, and suit anyone who may have curiosity enough—ay, even courage in these days—to read anything not highly flavoured with the marvellous. Having explained the reason why it

is thus made public property, it is necessary also to explain what are the materials of its composition. Anyone on reading this book will at once perceive that it is the work not of one, but of many. This is in accordance with the original idea on starting, that one would not be able to see as much as all combined, and much interesting matter might therefore be lost. It claims, therefore, to be simply a matter-of-fact narrative of our sojourn in the Pacific, with impressions of countries and localities gleaned from a certain experience, and reflected by the minds of the several writers.

This plurality of authorship also accounts for certain incongruities which the reader may perceive in the work. But it has been a matter of no small difficulty to connect articles contributed with the main story, so that all may fit in intelligibly, and as much confusion as possible be prevented when personal anecdotes are mingled with general movements. For any short-comings in the execution of this task, the Editor asks indulgence.

S. E. W.

July 1873.

# CONTENTS.

CHAPTER I.

Leave England in the 'Revenge'—Arrive at Madeira—Arrive at Jamaica A Dignity Ball—Leave Jamaica—Arrive at Aspinwall—

CHAPTER II.

Cross the Isthmus of Panama

Tomé

Leave Panama—Put in at the Galapagos Islands—Account of Charles Island—Proceed on our Journey—Amusements at sea—Arrive at San Francisco—Description of that city 16							
CHAPTER III.							
Arrive at Vancouver Island—Arrival of the Flying Squadron—Festivities on the Queen's Birthday: Races, Regatta, and Ball at Government House—A Visit to San Juan, Nanaimo, and the Fraser River—New Westminster—Burrard's Inlet—Sport in Vancouver Island							
CHAPTER IV.							
Leave Vancouver and arrive at San Francisco—War in Europe—Its Effect on San Francisco—Dance on board—Cricket—The Theatres, &c.—The Loss of the 'Captain'—Events in Europe—Hospitalities on shore—Social Life in San Francisco							
CHAPTER V.							
Sail from San Francisco for Panama—Amusements on board at sea— Arrive at Panama—Riot at Taboga—Ball to Sir Charles Bright—							

Christening on board—Leave Panama, and arrive at Payta—A Trip to the River Chira after Alligators—Sail from Payta, and arrive at

#### CHAPTER VI.

#### CHAPTER VII.

#### CHAPTER VIII.

Leave Islay, and arrive at Callao—Peculiarities in the Bay—Destruction of the city in 1787—Lima visited and described—The remains of Pizarro—A parallel between Cuba and Peru—Baths at Lima—The death of Athualpa, the last Inca—A Trip to Chorillos—Manner of Architecture, and general description—Leave Callao, and arrive at Payta—Extraordinary fall of rain in that place—Effects on the town—Leave South America, and start for the Sandwich Islands . 148

#### CHAPTER IX.

Passage from Payta to the Sandwich Islands—Amusements on board—Arrive at Honolulu—News from France—Description of Honolulu and the natives—Institutions and Laws—Their origin and government—Characteristic loyalty—The 'Pali'—Theatrical performance on shore—Visit of Queen Emma to the ship—Her amiability and popularity—Leave Hawaii, and go over to Maui—A Trip up the mountain—Hospitality of Captain McKee—Visit the grand crater of Haleokla—Start for San Francisco

#### CHAPTER X.

#### CHAPTER XI.

Confederation of British Columbia with the Dominion of Canada—The relations between England and the Dominion—Defenceless state of British Columbia—Amateur performance on board—The shooting in Vancouver Island—Deer Hunting—Account of a week's camping-out—Fishing in Vancouver Island—Performance at the Victoria Theatre—Ball at Government House—Farewell Ball to the Admiral—Leave Vancouver Island.

#### CHAPTER XII.

Vancouver Island to San Francisco—Effects of a gale of wind—Man overboard—Arrive at San Francisco—Illness of the Prince of Wales—Dance on board, as described by the 'Chronicle'—A Collision—Farewell to San Francisco—Remarks on Agriculture and Mines—Arrive at Mazatlan—State of Mexico—Requisitions of the Revolutionists—Dances on shore and on board—Mexican Characteristics—Seining parties—Leave Mazatlan, and arrive at San Blas—Local Tormentors—The Indian Chief

#### CHAPTER XIII.

A Visit to Tepic—Division of the Population and Territory of Mexico—Backward state of the Country—Description of Tepic—Cotton and Sugar Factories—Hospitality of Senor M——Leave San Blas—Touch in at Manzanilla—Farewell to Mexico—Sail for Panama—Secure a few Turtle—An attempt to account for tide rips—Arrive at Panama—Important news—Leave Panama for Payta—Futile attempt to stop a Steamer—The real Simon Pure turns up—Arrive at, and leave Payta—Bad state of the Ship—Passage from Payta to Valparaiso

#### CHAPTER XIV.

Arrive at Valparaiso—Bad state of the Ship—Cricket and Hunting—Go to Coquimbo—Peculiarities of the Earth's Surface—The parallel Terraces—The Titan Rocks—Copper Mines—The Works at La Compaŭia—Barrenness of the Country—Athletic Sports—Seining—Dance at La Serena—Shooting—A Day among the Golden Plover—Theatrical performance on shore—Great Success—Revolution in Peru—The Brothers Guttierez—Murder of the President—Tragic end of the Brothers—Fury of the People—Arrival of the 'Dover Castle' on fire: a total wreck—An Enquiry leads to difficulties—Excitement in the town—Arrival of the 'Fawn' and 'Peterel'—Leave Coquimbo 275

#### CHAPTER XV.

#### CHAPTER XVI.

News of the 'Scylla'—Leave Tomé—Coal at Coronel—The Mines—Leave Coronel—Anchor off Mocha Island—Enter Smyth's Channel—Anchor in Connor Cove—An Adventure on the Mountain—A perilous Descent and narrow Escape—Visited by Terra del Fuegians—Clothe them—A mighty Glacier—Leave Connor Cove—The English Narrows—Difficulties of the Channel—On a Rock—Anchor in Port Grappler—Pass through Guia Narrows, and anchor in Puerto Bueno Harbour—Anchor in Isthmus Bay—Arrive at Sandy Point—Remarks on this Settlement, Patagonians, and Terra del Fuegians—Leave Sandy Point—Arrive at St. Helena, Ascension, Madeira, Vigo, and England

## APPENDIX

TO

#### CHAPTER III.

General Remarks on the Passage from Panama to San Francisco and to Vancouver Island as to Winds, Weather, Currents, &c.—Remarks on the Harbours of San Francisco and Esquimalt . PAGE i

#### CHAPTER X.

Remarks on the various Passages between leaving Vancouver Island, July 12, 1870, and arriving there again, July 19, 1871—Winds, Currents, Harbours, &c.

#### CHAPTER XIII.

Remarks on the Passage from Vancouver Island to Valparaiso, calling at San Francisco, Mazatlan, San Blas, Manzanilla, Panama, and Payta—Winds, Currents, Anchorages, Temperature, &c. xi

#### CHAPTER XVI.

Remarks on the Passage from Tomé to Connor Cove—Smyth's Channel
—English Narrows—Port Grappler—Puerto Bueno—Isthmus Bay—
Sandy Point—St. Helena—Ascension—St. Vincent—Vigo—Plymouth
Sound

### LIST OF ILLUSTRATIONS.

H.M.S 'ZEALOUS' UNDER SA	IL .		•			Frontispicce		
CROSSING THE ISTHMUS OF I	PANAMA				to fo	ice po	uge	12
ESQUIMALT HARBOUR .					,,	,,	,	36
AMERICAN CAMP								42
BRITISH MARINE BARRACKS								43
SELKIRK'S CAVE								94
JUAN FERNANDEZ								95
BURNING OF THE CHURCH O	F LA C	AMPA	AĨĨA					104
U. S. S. SHIPS 'WATEREE'	AND 'A	MER.	ICA 'A	T ARI	CA			114
HONOLULU	•				to fe	ace pe	age	152
TWIN GIANTS, MARIPOSA GR	OVE							178
THE YO-SEMITE VALLEY .	•				to fe	ace pe	age	184
MAZATLAN								232
THEATRICAL GROUP OF OFFI	CERS							268
H.M.S. 'ZEALOUS' IN CONNO	R COVI	Ξ.			to f	ace p	age	308
	APPE	ND:	IX.					
APPROACHING THE GULF	OF PE	NAS	FROM	THE	NORT	HWAR	D:	
MAKING THE ENTRANCE	AT N	IGHT						xxi
SMYTH'S CHANNEL FROM THE	E NORT	HWA:	RD: O	FF CO	NNOR	COVE	. 3	xiii
ENGLISH NARROWS: FROM	THE NO	RTH						xx <b>v</b>

### MAP.

SHOWING TRACKS OF II.M. SHIPS 'REVENGE' AND 'ZEALOUS' BETWEEN DECEMBER 4, 1869, AND APRIL 12, 1873.



## OUR JOURNAL IN THE PACIFIC

### CHAPTER I.

LEAVE ENGLAND IN THE 'REVENGE'—ARRIVE AT MADEIRA—ARRIVE
AT JAMAICA—ITS STATE—A DIGNITY BALL—LEAVE JAMAICA—ARRIVE
AT ASPINWALL—CROSS THE ISTHMUS OF PANAMA.

WE left Plymouth in H.M.S. 'Revenge' on December 4, 1869, for passage to Colon. In addition to our own crew, there were on board several officers and men for ships on the West Indian station, to be disembarked at Jamaica. Madeira was to be touched at on the way. For the first four days we encountered bad weather—a necessary accompaniment to leaving England at that time of the year. Fortunately the wind was fair, which enabled us to bear with a certain equanimity an overcrowded ship. No accommodation had been provided; and, in addition, the ship leaked so much that the decks were seldom dry. We were not sorry, therefore, to get into milder weather, and find ourselves in smooth water and under sunny skies. Owing to our good sailing qualities several vessels were passed, and on the morning of the 11th Porto Santo was sighteda small island about forty miles from Madeira.

Approaching the latter the wind fell altogether, so

steam was got up, and it was 4 P.M. before we anchored off Funchal. Madeira is an island so well known and oft described, that it would almost seem superfluous to pause in our voyage to enlarge upon any of its characteristics. And, truth to say, beyond a natural scenery and climate unequalled in any part of the world, there is nothing worthy to dilate upon, unless it be vain regrets that such a spot is not an English possession. To us may be fairly attributed nearly all improvements. To many is it endeared by being the last resting-place of friends and relations. What sad tales are recorded by its tombstones; how many more, nearly ended, greet you in the streets!

Madeira was taken by us in 1801, and again in 1807. We retained it in trust for the royal family of Portugal, who had emigrated to the Brazils, to whom it was restored in 1814. But the Portuguese, like the Spaniards, seem to have no faculty of progress or self-improvement. Want of cleanliness in their towns, and an obsolete architecture, find a counterpart in the manners and customs of the inhabitants. Under what other régime would bullock-carts exist as a mode of conveyance, or how long be rendered a necessity by such narrow streets and an absurd manner of paving?

Leaving England and arriving here, you at once seem to belong to the past—to that primitive time before civilisation had begun to make such giant strides, though apparently struggling against the encroachments of a later age. With this brief protest, let us pass on.

Leaving Madeira on the 13th, we shaped our course for Jamaica, and with a fair wind, at once made good progress. But the various circumstances under which we left England now began to bear fruit in sickness, and on December 27 we had the misfortune to lose one of our officers from inflammation, of the lungs. This, the first death in our community, cast a gloom on all, as poor Goldney, short though his stay with us, had become universally liked, and also bade fair to be a bright ornament to the service.

On January 2, 1870, we arrived off the Island of Montserrat, so hove to, and sent a boat on shore with letters, then proceeded on our way. The next morning we passed a French aviso (gunboat), apparently bound for Martinique, and on Friday, January 7, we sighted the Blue Mountains of Jamaica, anchoring in Port Royal harbour a few hours afterwards, where we found only the 'Cherub' and 'Minstrel' gunboats.

Jamaica, since its discovery in 1494, has undergone many changes of fortune. Tremendous hurricanes sweep over the island periodically, occasioning much loss of life and property, and in 1692 an earthquake took place, in which the whole town of Port Royal was swallowed up by the sea. To this day a buoy marks the spot where the church of the old town lies buried, and where not long ago the point of the steeple could be seen protruding by divers at the bottom. At that time Port Royal was the great rendezvous of the buccaneers, the chief of whom, Morgan, was governor of the island; and at the time of this fearful visitation

immense riches are supposed to have been accumulated there. We are told, in a vague sort of way, that it was a very wicked place, for which punishment came upon it in the shape of an earthquake. In that case, they may expect another shortly. Morality is at a low standard in Port Royal. Marriages are seldom celebrated, though the children are legion. Ignorance is at the bottom of this. They have never been taught better; there is no one to teach them. The way they live, too, assists in producing this state of affairs. The houses are the merest hovels, not fit for a dog to live in, often consisting of only one room, where I have seen as many as twelve of a family all huddled together. I must say, the women are far superior to the men—cleaner, more honest, and most good-tempered; besides which, they are much better looking in comparison, many having very fine figures—erect as a dart, with a long, swinging gait. But when they get old, I know no more repulsive-looking creature. The men are thievish, cowardly, and dirty, also unconquerably lazy, so that, seeing the island in its present state, and comparing it with an island like Cuba, or what Cuba was before the rebellion broke out (which had nothing to say to slavery), one is almost inclined to doubt the wisdom of the Emancipation Act thirty years ago. is pitiable to see all these fine plantations going to ruin from having no one to work them. The natives will do nothing as long as they can just manage to live, and the hire of a day's labour once a fortnight will enable them to do that. I am not speaking from hearsay, or an occasional glance, but from the result of several visits during a period of four years, one of which was paid shortly after the late rebellion there, since which I observe a great improvement in the whole island, the natives being more civil and inclined to work than formerly—good signs, which lead one to hope there may be better days in store for this beautiful island; and, under a firm and wise rule, it may develop all its natural resources, and become again one of the most valuable of our island possessions, instead of being, as it is now, a byword of reproach.

All who have been to Jamaica or any of the West Indian islands know what a 'dignity ball' is. The name was no doubt given by the whites from the way in which the black ladies stand on their dignity, going through all the steps with the utmost precision and gravity. They are passionately fond of dancing, and very resentful at any attempt to turn it into a romp. This, however, is often done, and a general row ensues, in the course of which ladies take to abusing each other in the most undignified way, and even coming to blows.

That the old custom is not yet extinct, the following account will show, of one that took place during our stay, by the hand of an old Port Royal ranger:—'Invitations had been issued for two dignity balls on Monday evening, and the respective hostesses were our old friends Josephine Johnston and Betsy Paisley. Let us look in and see what is going on at the lovely Josephine's. "Why, I don't hear any music," said my

friend W.; "surely they have a fiddle or something." However, we soon discovered that poor Josephine's musicians had not arrived, so all "de ladies" who had come from Kingston were loud in their abuse of "de nasty black tiefs."

Let me now introduce my reader to Mrs. Betsy Paisley. But first we must squeeze our way through the assembled crowd of Port Royal citizens; so open your eyes, but shut your nose as well as your mouth if you can, until you get somewhat accustomed to the very strong perfume they use here, called 'Bouquet d'Afrique!' There, we were through at last, thanks to the one policeman belonging to Port Royal; he is endeavouring to keep order, and a great deal of talking is going on between him and another black fellow. Let us listen to what they are saying. 'You move on dere, you black nigger you,' says Mr. Policeman. 'Who nigger?—you nigger yourself,' retorts the other. 'Suppose you know who I am,' says Bobby. 'Yes, I know who you are, you de constable, but I claim my right to sell my ice-cream.' But poor Betsy is waiting all this time, so let us enter. Picture to yourself a whitey-brown woman, of rather over the middle age, who must have been at one time a very fair specimen of the ladies of Port Royal, in a white muslin dress très-décolletée, and with a very gay bandana handkerchief round her head, the dress trimmed in the latest fashion, with a great deal of Grecian bend, and you see the beautiful Betsy. Dancing was going on at a great rate, and many of our brother officers might be seen joining in the giddy waltz with a zeal that any poor London dandy might well envy. Just look at F----. Why, he has got C---'s long-tailed blue on; 'go it again, Sarah.' I wonder what his last partner would say if she could see him now. 'How dare he go whispering the same flattering words in that thing's ear as he did into mine at Lady C.'s last winter!' would, I expect, be the exclamation. Ah, well! we'll hope he has told all and been forgiven long ere she chances to read this. Refreshment, delightful word, was now the order of the evening; accordingly we repaired with our partners to the kitchen, where an elderly damsel was sitting selling bottled beer, champagne, cakes, and rum. Having refreshed ourselves, the dance was resumed, and falls were frequent until midnight, when we thought it was time to return on board, so dropping a dollar in the poor box held out at our departure, we bid adieu to our charming hostess and friends, and the following morning were soon out of sight of Port Royal.

We left Jamaica for Colon on January 11, taking with us the 'Minstrel' gunboat, to assist on arrival in conveying baggage and stores to the shore in case we could not go alongside the wharf, not knowing the depth of water there. Just before leaving Jamaica we managed to engage a young photographer to go with us for the commission, and take views of whatever place of interest we might happen to visit, many of which are to be found in the Pacific, interesting as well as beautiful, not yet invaded by that modern sign of civilisation. We performed the passage down to Colon in

the short space of fifty-six hours, a distance of about 530 miles, and on arriving, heard that the 'Zealous' was on the other side of the Isthmus anxiously awaiting our arrival, and that all arrangements had been made for our crossing on the 17th ult.

So now about to leave the waters of the Atlantic for those of the Pacific, and to commence our new life with light hearts and joyful anticipations, let us hope they may be realised, and that, at the end of a three years' commission, we may look back at the interval without one regret, and should it be our fortune to return the way we came, may the same faces, undiminished by the common enemy, take their places as they did on this memorable occasion, when, for the first time in the annals of naval history, a ship's company of 600 men were to be transported from one ocean to another by land, and the process limited by the advance of science to the question of a few hours, instead of so many months. But the description of our crossing I must leave for an abler pen, our peculiar circumstances being, I hope, sufficient apology for doing what has been done so often and so ably before.

On Friday morning, the 13th, we went alongside the railway wharf preparatory to crossing. There are three wharves at Colon, each about 800 feet long and 40 broad; alongside them is a mean depth of 27 feet, with a rise and fall of one foot. The piles are from the forest of Maine (U.S.), and have to be coppered below high-water to resist the attacks of a boring worm, (Teredo fimbriata), a great wood destroyer.

The town (as it is called) of Colon, or Aspinwall, stands on a small island called Manzanilla, cut off from the main land by a narrow frith. This island is one square mile in extent, composed of coral, and only a few feet above the level of high water. This in certain months of the year, owing to its swampy nature, causes it to become very unhealthy.

İmmediately facing you on landing is a street with few shops, but many bars; on the left, offices of railway company, having opposite, and on the other side of a triple line of rails running in the middle of the street, the freight department, a solid stone structure. Further on to the left, facing the harbour, stands a very plainly-constructed English church, and close to it the English Consul's house. These, together with the hovels of the negro population, comprise the town of Colon. Of course it has a market-place, a spot no one would be disposed to visit a second time if possible to avoid it. The most conspicuous objects are the flocks of turkey-buzzards one constantly sees fighting and scrambling over the filth and dirt of the place, certainly most useful inspectors of nuisances, but who do not seem such distant relations to the dirty little black children of both sexes who, guiltless of garments, appear to vie with the birds in picking up what they can find.

The railway lines run along the street in front of the houses, having sidings down to the different wharves. No sooner was the 'Revenge' secured than baggage waggons were immediately run down to the ship's gangway, and every preparation made by the company's servants to facilitate our transit. So on Friday afternoon the work of clearing out the ship of stores, &c., commenced, and owing to the hearty way the men worked nearly every thing was placed in the vans that evening, leaving us nearly all Saturday to prepare the ship for our successors.

Sunday truly proved a day of rest, while those who sought for amusement in the town had to restrict themselves to seeing a cockfight, which is about the only amusement the residents of Colon indulge in. Game cocks appear to be very plentiful, every house having one or two chained by the leg to the doorstep. At the matches heavy betting takes place, considering the poorness of the population, and putting two or three hundred dollars on a bird is not considered anything out of the way.

Great excitement is at times afforded to the inhabitants by the appearance of a huge crocodile frequenting a piece of water in the centre of the town, varying in size, according to reports, from eighteen to thirty-five feet in length. As 'cocktails' appeared to be one of the principal occupations during the day, that no doubt accounted for the variety of statements as to its size, though there was no doubt as to its existence, and also that every attempt to catch the monster had failed, though the most tempting baits had been offered to it.

It was decided on the Sunday evening that the port watch should cross the Isthmus on the following forenoon; consequently there was a tremendous hurry and bustle completing the preparations, officers' servants rushing about in all directions for carpenters to nail up, sewing up, &c., so that luggage might be transported with as little damage as possible. Half the officers were to cross with each watch, and altogether the journey was looked upon more as a pic-nic party on a large scale.

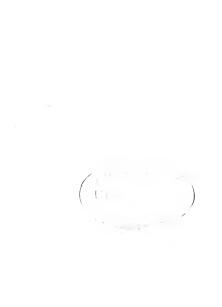
Monday morning arrived, and with it an overpowering heat, which was not pleasant to look forward to, considering the journey before us. But there was not much time to think about that, time only to look round to see nothing was left behind, and one last fond look at the old ship that had conveyed us so many miles in safety, not forgetting the blue Atlantic that was to separate us for three long years from all those we held most dear.

But the bugle sounding the assembly soon broke our 'reverie,' and on the wharf the port watch were falling in; then, headed by the drum-and-fife band, marched out to where the train was drawn up just outside the gate of the wharf. This consisted of a very powerful engine and a tender stocked with wood, then a van for the live stock, then following six saloon carriages, each about forty feet long, fitted up in the American style, with free communication from one end to another.

Just before starting a photograph was taken, the men inside and the officers standing outside. This being satisfactorily accomplished, the signal was given —a shrill whistle—and the whole mass moved slowly

off amid the acclamations and cheers of the natives, in which 'Jack,' in the excitement of so novel a situation, could not refrain from joining. Once fairly off, and having entered the tropical wilderness, one had time to look round and form some idea of the wild scenery that we were so rapidly passing through. The line on leaving Colon winds its way through a deep cutting, across an unwholesome looking morass, and along the right bank of the river Chagres, of which occasional glimpses are caught from amidst the tangled and twisted foliage that shuts it in on either side like dense walls; where one can recognise the cocoa-nut tree, mango, plantain, and almost every description of tropical fruit strangling themselves with vines and Roses and streamers of every coloured blossom crowded with singing birds and butterflies of all description and colour, but all signs of civilisation ceased; nothing appeared on either side except jungle. The luxuriance of the vegetation was most remarkable, ferns growing to a great height; everything appearing to grow to the utmost extent and ripeness, which shows how good the soil must be, . and to what uses it might be put if it was not for that great obstruction to cultivating the land in these regions, viz., the deadliness of the climate, especially in this one spot, where it would be almost impossible to live, so fatal are the swamp fevers. By this time we began to think a little lunch would be acceptable, as the heat was most oppressive, so the word was passed from carriage to carriage, and very soon all

CROSSING THE ISTHMUS OF PANAMA.



were assembled in the end saloon, where a large basket was produced containing blocks of ice and bottles of beer, the appreciation of which defies description, but may be understood, perhaps, by those who have attended 'a Goodwood Cup' on a hot July day.

The 'blue-jackets' meanwhile were singing: some playing concertinas, others penny-whistles, and all apparently enjoying themselves. We crossed the river on a very fine girder iron bridge; the river appeared much swollen and very muddy. Having a special train was rather unfortunate in some ways, as we were unable to stop anywhere, and therefore could not visit any of the numerous wigwams whose inhabitants seemed to live in the most primitive style, sleeping outside under shady trees in their grass hammocks, with little children, as black and naked as on the day of their birth, running all about the place. When about two-thirds of the way across, and after ascending rather a steep incline, we came to a siding where we drew up, evidently with the intention of letting the old ('Zealous') crew pass, as the line is single with this exception. Here all the officers got out whilst we were waiting in anxious expectation to catch a glimpse of our friends, and give them a cheer as they passed. Suddenly there was a rush for the carriages as a whistle was heard foretelling their approach, and in a minute or two the two trains were (as Jack would say) alongside each other, and the cheering that ensued was overpowering. The train stopped; everybody poured out; old friends, old shipmates meeting, not having seen each other for years, and in the middle of the Isthmus of Panama. It was a strange scene this meeting—in a wild spot, away from any civilised abode; each had been looking forward to it for some time, and then it came: a hurried grasp of the hand, a few words in haste, and then the two trains moved slowly off in opposite directions, one party homeward and the other outward bound.

Fortunately we had not many more miles to travel, as after so much excitement the novelty of the situation had nearly worn off. Already the summit of Mount Ancon was in sight on our right hand, whose southern base is bathed by the blue waters of the Pacific; and on the left one could plainly see the 'cerro de los buccaneros,' or the 'hill of the buccaneers,' from the summit of which the terrible Morgan first looked on Panama in the year 1670.

We rattle on, anxious to catch a glimpse of the Pacific, scream through one or two stations, sweep round the base of Mount Ancon, and at last the cry of 'Panama in sight.' Before us are the tall spires of the cathedral, the long metal roofing of the 'terminus,' and the quiet waters of the Pacific. Shortly afterwards we drew up in the station, and were greeted on the platform by our Consul, who informed us a steamer was waiting at the end of the wharf to convey us to our future home, H.M.S. 'Zealous,' and that all arrangements had been made with regard to the conveyance of the baggage on board that evening. So

when all were on board the steamer, we steamed out to the Bay of Panama, and soon the 'Zealous' was seen lying a long way off, nearly four miles in the direction of the Island of Taboga. In the bay the principal objects that catch the eye are large flocks of pelicans. The brown pelican is a permanent resident on the southern coasts of America, frequenting Panama Bay, the Gulfs of California and Mexico, and other places.

At last we were alongside the 'Zealous,' and heartily glad to get on board after the fatigues of the day. We were kindly welcomed by Admiral and Mrs. Hastings and all the remaining officers. They crossed over the next day, and that evening likewise arrived the remainder of our officers and men. The transposition was now complete; we hoisted the flag the following day, and saluted it with thirteen guns. Our cruise in the Pacific was begun; this shall end the first chapter of 'Our Journal.'

## CHAPTER II.

LEAVE PANAMA—PUT IN AT THE GALAPAGOS ISLANDS—ACCOUNT OF CHARLES ISLAND—PROCEED ON OUR JOURNEY—AMUSEMENTS AT SEA—ARRIVE AT SAN FRANCISCO—DESCRIPTION OF THAT CITY,

WE left Panama in the 'Zealous' on January 25, and went over to the island of Taboga to coal. Our final start for the Sandwich Islands was made on the 27th. Weather fine, but hot. Passed great quantities of turtle, and on one or two occasions tried to harpoon some, but unsuccessfully. It can only be done when they are floating asleep on the surface. Crossed the 'Line' for the first time in the 'Zealous' on February 2, but Neptune did not come on board, and the usual festivities were dispensed with. It is a custom dying out to a great extent, being without rhyme or reason, and often causing ill-feeling or accidents.

Passing close to the Galapagos Islands, the Admiral determined to put in and try if we could not obtain some fresh meat and vegetables, of which we were greatly in need. So, accordingly, we anchored off Charles Island on February 4. A 'sportsman' gives us a very good account of this interesting island:—

'Hearing a fabulous account of the wild cattle, wild pigs, goats, and ducks to be found on the plain in the interior of the island, a party of sportsmen (of which the writer was one) started from the ship in the gig at daylight on the 5th, under the guidance of a native, or rather, inhabitant, armed with rifle and gun. To obtain a landing-place at the nearest point to the plain, we had to pull rather more than two miles along a rugged shore. On our way we encountered immense shoals of fish, playing lazily on the surface of the water, occasionally disturbed by the swoop of a pelican or gannet, or by the more stealthy attack of a seal, numbers of which we saw; also many turtle, the latter too wide awake to be caught; but with a small boat and a turtle-peg they could easily have been taken. Owing to immunity from the persecution of man, the sea birds were wonderfully tame, watching our approach with the utmost unconcern. Having landed, and hauled our boat up on a shelving beach of sand and powdered scoriæ, we entered a pathway leading through scrubby mimosa, and leafless, parched-up shrubs, nourished on a soil of basaltic lava and scoriæ.

'After a walk of two miles we reached the settlement, consisting of about forty people—Spaniards and half-castes—living under rude tents, or rather awnings, whose occupation is to collect orchilla weed, which possesses valuable dyeing qualities. There was but one woman in the community, probably "washerwomangeneral"—if they indulged in such a luxury, which their general appearance did not lead one to suppose—or "maid-of-all-work." A rather fine-looking man approached, whom they informed me was the "Governor," and had the air of a well-to-do Spaniard. He received us courteously, and by means of a very small stock of

Spanish and a little French, I was able to gather from him that he rents three of the Galapagos group from the Ecuador Government, at a rent of 1,200 dollars (about 240*l*.) per annum, the produce of which wholly belongs to him; but the orchilla, already alluded to, is the only article exported.

'Having been joined by another party from the ship, also in pursuit of game, accompanied by "His Excellency," we proceeded on our way to the plain. As we wound along by a tortuous path towards the centre of the island, the brushwood improved in size and appearance, relieved by flowering shrubs, and here and there a large tree reared its head. Innumerable small birds, some of bright plumage, twittered among the branches, and several good specimens were obtained by our indefatigable naturalist, the doctor.

'After a laborious walk of three miles in an oppressively close, hot atmosphere, without a breath of wind, we topped the head of the gorge, lying between a high volcanic cone on one side, and a wooded hill on the other, and entered the plain, which may be from eight to ten miles long, and four broad. The soil seemed to be decomposed lava and clay, on which was a thick covering of Guinea grass, offering excellent pasture for the wild cattle, &c. In some places the plain is open and park-like; in others, wooded, with trees of considerable size, principally a species of acacia, but interspersed with fruit and other trees, amongst which the fig-tree was conspicuous for spread

of branch and rich foliage. There are also lime, orange, cherimoya, and others, no doubt, in this fertile plain.

'Pushing across the plain we came to a small muddy piece of water, on which reposed a flock of unwary teal, which allowed us to approach within easy shot, when, having taken wing, a volley brought down twelve, which were all secured through the energy of our good retriever "Dash." The teal I found slightly different from the English bird; it was in vain I looked for the beautiful barred feather so dear to anglers. I thought I had obtained a prize in shooting them, but their value was diminished in my estimation when my favourite feather "was not." In the vicinity of the pond I observed a splendid white bull and a cow, but failed to get a shot. I might, indeed, have wounded the noble animal, but this I should have regretted. These were the only wild cattle I fell in with. pond, being the only piece of water in the plain, is resorted to by all the wild animals for drinking; it was, however, too muddy and foul for our use, so we were fain to make for a spring about a mile off, en route to which we encountered the other party, which had separated from us on entering the plain. They had seen a large herd of cattle, but had failed to bring any The spring, which we duly arrived at, trickles over a perpendicular rock, shaded by trees, and in the slope below, watered by the rill, is a grove of plantains, banana, and orange trees; none of these were ripe, but the spot was cool, and we enjoyed our lunch and pipe,

which we considered had been well earned, mild though our sport had been.

'In the neighbourhood we observed a number of small caves hollowed out of the tapa rock, and used evidently for the purpose of shelter; some also for ovens wherein to bake meat, as the ashes of fires testified, and the whitening bones of many animals indicated the shambles close at hand. Charles Island was at one time a penal settlement of Ecuador, and this plain is said to have been once well cultivated and to have produced abundance of maize, vegetables, and fruit, of which there are ample indications. At an earlier period the buccaneers resorted here for refreshments, and to refit their vessels. Whalers also made it a place of call. Several thousand head of wild cattle, besides pigs and goats, roam on its plains, no doubt brought originally from the continent. used also to be immense numbers of terrafin (a land tortoise), which reached an immense size—frequently several hundredweight; but these have almost disappeared from Charles Island (albeit they abound in some of the other islands). Their flesh is excellent and well esteemed; the whalers took them on board as fresh provisions. There are also large iguanos and lizards; the former inhabit the sea shore, and are webfooted, which enables them to search in the water for a sea-weed they are fond of.

'The climate of Charles Island is very temperate considering its position close to the Equator. There is no regular rainy season, but the showers are more frequent and heavier in October, November, and December than at other periods. The immunity of the Galapagos from great heat may be accounted for by the stream of cool water (Humboldt's Current) which encircles their shores, at a temperature of 62° to 72°. The group is entirely volcanic, and their origin of not a very remote date. Each island has one or more craters, all extinct but one, which occasionally gives signs of life. The slumbering fires may, however, again burst forth with terrific grandeur during one of those convulsions of nature so frequent along the coast of Peru.

'But it was now time to return on board, so, accompanied by the Governor, we embarked and reached the ship at 4 p.m., our bag being twelve teal and two iguanos; the other party had, perhaps what was even more acceptable—two pigs. We were rather startled on our way back to the ship by the appearance of a shoal of very large porpoises all round the boat, which gave good sport to a rifle, and several were hit, but time would not permit us to stop and make an addition to our bag. The Governor generously gave us 200 lbs. of meat, and in return we presented him with ale, porter, and biscuit. I now conclude this short account of a not very successful day's sport, hoping at some future day to renew my acquaintance with the wild cattle on Charles Island.'

We left Charles Island on the afternoon of the 5th, and were immediately beset by calms, but not having much coal on board were chary of getting up steam.

But steaming to the south-west on the 10th, we

picked up a fair wind the next day and made sail, though the breeze was very light. Looking forward to a long passage, of which this was only the fore-runner of others in the future quite as tedious, to vary the monotony and to create amusement we determined to institute a debating club on board, which should hold its meetings once a week. The subject to be introduced in the form of a lecture on any topic bar three: religion, discipline, and politics of the present day—discussions on which subjects had better be avoided.

On February 23, being becalmed, we had recourse to steam. Things began to look serious; our stock of provisions getting low, our coal diminishing rapidly, and still more than two thousand miles from San Francisco, as by this time we had given up all idea of going to the Sandwich Islands this cruise. This ship, though good in accommodation and ventilation, is hardly fitted for a station like the Pacific, where you are necessitated to be so much at sea, and must therefore depend chiefly on your sail power, and ought to be able to take advantage of every light breeze, in which this ship does little.

On February 24 we came across a very light breeze, which continued with occasional calms up to March 1, when we at last fell in with the long-looked and wishedfor trade-wind, and began fairly to move. On March 3 we had our first meeting of the debating club, when a lecture was given by the Chaplain 'On the Laws of Nature as regulating the conduct of Man, independent

of Religion,' which was delivered with an eloquence equally his characteristic in the pulpit. There was not much debating, the subject perhaps being too deep. The following week the Admiral gave a very interesting lecture on the atmosphere, explaining the cause of the trade-winds and the production of moisture. We continued to run up with the northeast trade till March 18, when it began to fail us, and the next day we arrived at the 'Variables,' being now 470 miles from San Francisco, with very little coal and a scarcity of provisions. For the next week we were unable to make much headway owing to calms and baffling winds, so had to exercise our patience as best we could. We heard a very interesting lecture on Warren Hastings from F-, also one from the Captain on mesmerism and spiritualism, which we were all advised to have nothing to do with, 'they being agents of the devil,' who has apparently a great deal to answer for. On March 17 we got a strong fair wind, and being only 100 miles off the day before, expected to get in that morning. But when we arrived within thirty miles of our port the wind increased to a gale from the northward, and having only about twenty tons of coal left, we found ourselves making very little headway, and expending that valuable article to no purpose. So we were in rather a fix, if blown away from our port with such a small stock of provisions, not knowing when we might get in, with scurvy appearing on board. There was no help for it, however, but to make sail

and beat about till we could get closer or the wind went down.

That afternoon a sad accident occurred to add to the ills of our position; a man fell down from aloft, fracturing his skull, and died shortly afterwards. Most fortunately the wind subsided during the night, and the following morning it was quite calm, so we got steam up, being thirty miles off, with about twelve tons of coal left. But even then it was very close work, because when we neared the harbour we found a strong tide running against us, but by dint of assisting our coal with wood just managed to steam through the Golden Gate, and anchored off the town of San Francisco. The following account of our stay there will give the reader some idea of the place and its inhabitants.

We arrived at San Francisco on March 28, after having been sixty days out at sea from Panama; during which time we had not been living on the fat of the land, so the sight of a town, with visions of beef and mutton floating before the imagination, was very pleasant to us. San Francisco is a very fine-looking town, and reminds me much of Quebec, having the same shape of river and description of steamer plying on it. It is most wonderful to observe the progress this town has made in an incredibly short time. To understand this fully it is necessary to look at the history of the State of which, though Sacramento is the capital, it is the largest and most important town.

California was discovered in 1537 by Cortez, and

many surmises have since been put forth concerning whence this name was derived. As the discoverers were Spaniards, many favour the supposition that it came from two words, 'caliente,' hot, and 'fornalla,' a furnace, an allusion probably to its climate. That certainly is unlike almost every other country, but not so much on account of its heat as that changes are less frequent, and not so strongly marked. Thus, on an average, it has been computed there are over two hundred clear days in a year without a cloud, and sixty of rain. Few countries can boast that. About half as much rain falls in San Francisco during the year as in the eastern States, and nearly all the rain falls between November and June. Seldom indeed does it fall in any of the other months.

We know little of California for 300 years after its discovery, and few records of those times have been preserved. We know the aborigines of California were very numerous at that time, and for many years it was a puzzle where they originally came from. Time has elucidated the mystery. Speaking on this subject, Mr. Cronise, in his admirable work on the 'Wealth of California,' says, 'The Hindoo, Chinese, and Japanese annals all correspond in recording the fact that about the year 1280, Genghis Khan, a great Mongul chief, whose name was a terror in Europe, at the same time invaded China with hordes of barbarians from Tartary, whom his descendants hold in subjection at the present time. Having accomplished this object, he fitted out an expedition consisting of 240,000 men

in 400 ships, under command of Kublai Khan, one of his sons, for the purpose of conquering Japan. While this expedition was on the passage between the two countries a violent storm arose, which destroyed a great part of the fleet, and drove many of the vessels on the coast of America.'

Grotius says, 'The Peruvians were a Chinese colony, and the Spaniards found at the entry of the Pacific Ocean, on coming through the Straits of Magellan, the wrecks of Chinese vessels.'

'There are proofs clear and certain that Mango Capac, founder of the Peruvian race, was the son of Kublai Khan, the commander of this expedition, and that the ancestors of Montezuma, who were from Assam, arrived about the same time. Every custom described by their Spanish conquerors proves their Asiatic origin.'

According to the same writer (Cronise) the aborigines of California have decreased in forty years—1823 to 1863—from 100,800 to 20,000. Of course it is perfectly open to question these surmises. The obscurity attached to the history of California continues till about the year 1823, when it falls into the clutches of Mexico. This country retained possession for thirteen years, when it became independent. The United States took possession of California in 1846, and it was just at this time that gold was discovered there in abundance. Owing to this all nations flocked here in great numbers, so that in 1850 San Francisco rose up out of nothing and speedily became the fine town it is now.

But from 1853 to 1860 there prevailed social and political disorganisation. Unscrupulous adventurers, or more correctly, rowdies, held for some time undisputed sway, while universal suffrage enabled them to use their power in a most corrupt and detrimental manner to the public welfare. Crimes were committed daily, and no life or property was secure. This state of affairs brought about that extraordinary combination known as the Vigilance Committee. This was first instituted in 1851, but only existed for a short time. 1856, after a bad state had prevailed for some time, it was brought to a climax by the shooting in open day of a popular newspaper editor who had been prominent in exposing abuses. The crime was committed by a well-known ruffian and malefactor, but who attained some position in San Francisco by a glibness of tongue and plenty of audacity. But when this event took place the whole population rose in indignation. The Vigilance Committee was re-organised, and out of 12,000 white inhabitants 9,000 became members. They set the law at defiance; took the murderer out of gaol and hung him; then proceeded to arrest a large number of persons who had committed crimes; executed two more, and banished others. For eight months they remained masters of the city; neither the militia nor legislature could do anything.

The effect was most beneficial. No punishments were inflicted without a trial that was conducted deliberately, and there was no haste to execute sentences.

No judicial process could release a man whom they had sentenced. This Vigilance Committee conducted all its business secretly, and no record of its transactions has yet been published. It is universally believed that entire control was vested in an executive board of thirty-three, chosen at one of the first meetings. But their names never appeared, though they really had an absolute power. Whom they ordered to be hung were hung, to be imprisoned were imprisoned; yet there never has been any accusation of injustice or partiality, for all who were punished richly deserved it.

After this committee was disbanded the members allowed the usual procedure of law to take its place. Certainly it was an organisation without its like in history, and many now speak of it almost as if desirous of its revival. Sure it is, that rather than submit to the sway of such ruffians as then existed, the slumbering energies of this committee will again be roused.

During the last few years the Pacific railroad has been built, and San Francisco, as the terminus, received a great impetus from that undertaking. But it brought a great number of adventurers from the eastern States, so that the labour market is overstocked. Besides, there is a large colony of Chinamen who monopolise nearly all the labour. They are not so quick as white men, but very steady, and work at half the price. But this latter fact causes them to be viewed with great disfavour by a large

sect, chiefly Irish, so that many predict a grand row between them before long.

There is a very good cricket ground at San Francisco, and a challenge came from the club directly we arrived. The day appointed, however, proved wet, so that after playing a short time we were compelled to adjourn. We experienced while in the field the shock of an earthquake. They are of frequent occurrence in San Francisco, though varying in severity. It is, they say, a curious time when a severe earthquake takes place. All business is suspended, and everybody rushes into the streets, where they wait till all danger is over. Women have a great dread of earthquakes, from the peculiar sensation of helplessness attached to these visitations.

Our adjourned match took place a few days later, but after a close game concluded in favour of our adversaries, who won by fourteen runs. Our short stay at San Francisco was also signalised by various dances and pic-nics, and all will remember with pleasure our trips to Oaklands. But before saying good-bye to San Francisco, I must say a few words about the town and its inhabitants, though it needs a longer stay than ours proved to give anything like a just description. Considering its age as a city, one cannot help remarking the size and solidity of some of its buildings, and also the business-like appearance of its inhabitants, all apparently bent on one object, the making of money. I should think it must be the most cosmopolitan town in the world. Here you see

all nations. Scotch and Irish abound in great numbers, but do not seem to live in harmony together, the orderly habits and persevering thrift of the one not being agreeable to the Bohemian tastes of the other. In fact, the Irish here, who, to speak the truth, are the lowest of their class, are a source of annoyance to everybody. To the Americans, because they are the continual cause of rows, and muster a large force of Fenian supporters, which movement certainly finds no countenance with the respectable portion of the American community; to the Scotch, because a certain amount of the odium their conduct elicits is reflected on them: and lastly, to the poor Chinese, whom they are always threatening to exterminate, because they find no difficulty in getting work. Talking of the Chinese, it is very curious to see the portion of the town which they inhabit, and which is devoted exclusively to them. Here they carry on their trades, and practise all professions, adapting themselves to a strange country with wonderful facility. Nay, I am even told that Chinese doctors are in great request among the white people, especially among the women, though it is difficult to believe credulity would counteract the feeling of repugnance at such an innovation of the domestic hearth. A great love of the old country exists in this migratory race. You see them everywhere on this side of North and South America, and you will always find a halfexpressed hope and desire to return at some period to their native land, as soon as they shall have amassed money enough. With that end in view they plod on patiently and perseveringly, unmoved by scorn and contumely, till they are enabled to return to their native country, live there quietly the rest of their days, and be buried in their own village. Now, it is a constant habit, if a Chinaman dies in San Francisco, for his friends to subscribe and send his body across in a steamer for burial; which, if they knew it, would cause no small disgust to the passengers. I should have liked to have learnt more of the manners and customs of this extraordinary people, who date their existence back so many thousand years, but I hope to do so on some future visit, convinced that further examination would be amply repaid in interest and amusement.

The Americans are essentially speculators. Luck is the goddess at whose shrine they worship; its narrow path has more charms than the broad road of time, and hard work; to make fortunes by a single cast of the die, rather than accumulate riches by a life's perseverance. Hence in America the prevalence of gambling, which infests all classes, and is probably the cause of more crimes than anything else. San Francisco may vie, no doubt, with any of its eastern brethren in this respect, though, from the secrecy in which these proceedings are carried out, it is difficult for a stranger to find out such an evil exists. He will not, however, long remain in ignorance. The intimation generally comes about in this way, and I speak from personal experience. A well-dressed man comes up to you in the street, or a shop, and requests you will take a glass of wine with

him at his club. Either you are a novice, or curiosity prompts. In any other country but America you would at once refuse. Here you accept. He leads the way, turns in at a door, up a few steps, another door with a small trap hatch, a knock, a face peers through, it is opened; you enter, and find yourself in a gambling saloon. Not a large room full of people, but a small web with about six spiders. Your conductor presses you to play. You refuse, now seeing the dodge. To give inspiration, he places down a gold piece and speedily wins twenty. This should convince you the whole is a plant, so back out as speedily as possible. In my case I am convinced this was simply a den of thieves, and my conductor depended on what came out of my purse for a percentage. When I persisted in going without risking a cent, he seemed in a great state of mind. Social life in California, and especially San Francisco, has many peculiarities, but our stay was so short that any account could only be superficial. So therefore that topic must be reserved until further experience can allow any opinion worthy of consideration to be expressed. For the same reason many other interesting subjects connected with the country, such as its mineral and agricultural prospects, cannot now be entered upon. That of attempting to grapple with such important details is a too common error in this travelling age. Countries have suffered grievously from a too prolific pen.

This must be my excuse for presenting such a meagre outline of such an interesting locality. We are now

going north, but will return in a few months, when I hope a more lengthy stay will enable me to say my conclusions were not too hastily arrived at, and that our regret at leaving will be felt as much if not more than it is now.

D

## CHAPTER III.

ARRIVE AT VANCOUVER ISLAND—ARRIVAL OF THE FLYING SQUADRON—
FESTIVITIES ON THE QUEEN'S BIRTHDAY—RACES, REGATTA, AND BALL
AT GOVERNMENT HOUSE—A VISIT TO SAN JUAN, NANAIMO, AND THE
FRASER RIVER—NEW WESTMINSTER—BURRARD'S INLET—SPORT IN
VANCOUVER ISLAND.

We left San Francisco on April 14, and arrived in Esquimalt harbour on the 23rd. After steaming northward along the land for two days, a north wind forced us out to the westward, and for three days we went further away from our destination. But a shift of wind made our position an advantageous one, and allowed us to make the entrance of the straits, when we steamed slowly through.

These straits were named after a Greek, called Juan de Fuca, who reported their existence in 1592, though then universally disbelieved. It was more than two hundred years later before it was entered by an Englishman, named Meares, who called it Fuca Straits. In 1792 Vancouver visited the coast of Washington, and gave the first clear and accurate account of the Straits of Fuca and Puget Sound.

The distance to Esquimalt harbour is about sixty miles, with magnificent scenery on both sides; but it is exceedingly desolate, not a habitation to be seen. It would be difficult to find a snugger harbour than

Esquimalt; completely land-locked, surrounded on all sides by dense forests. There are few houses outside of a diminutive dockyard, but through the trees appears a larger building than usual, which serves as a naval hospital. At the head of a shaky pier is another building, designated the Naval Club. Though on a small scale, it supplies a want which was long felt. Altogether, there is a charming *abandon* about this spot; a short plunge into the dense forest, and all signs of civilisation cease—birds and insects are your sole companions.

Victoria, the capital, is some three miles off, but has little imposing about it. It bade fair to become a thriving colony in 1858, when there was such a rush there in consequence of the gold discoveries. But it rapidly subsided, and the reaction was most injurious. Nearly all left who could; and since that time Vancouver Island has had to struggle onwards unassisted from without, having to contend against gigantic obstacles in the natural features of its country. An immense quantity of land is uncleared and uncultivated. Labour is most expensive. The only remedy appears to be a good Government scheme of immigration, that the resources of the country may be opened up. immigrants themselves should be assisted with grants of land, and immunity for some time from taxation. The great difficulty is in clearing the land, so dense is the timber and undergrowth.

The 'Flying Squadron' had been expected some time, and arrived on May 15, from Japan. There

were six ships, 'Liverpool' (flagship of Admiral Hornby), 'Phœbe,' 'Liffey,' 'Endymion,' 'Scylla,' and 'Pearl.' All were under sail, the 'Scylla' leading. They arrived in time to assist in the festivities on the Queen's birthday—a great day in all our colonies. Here it is the occasion of a general holiday and horse-racing.

The racecourse at Beacon Hill, near Victoria, overlooks the straits, the snow-capped mountains showing out clear and distinct on the other side. To this spot, on May 24, could be seen all descriptions of persons and vehicles wending their way. Colonists of all descriptions, farmers from distant secluded spots; the swarthy Indian, wrapped in his red blanket, not a few already reeling from the effects of fire-water; and last, though not least, 'Jack,' with shoes in his hand and pipe in his mouth. Besides all these, a fair sprinkling of equestrians, of both sexes, all cheerful and bent on merriment; no cries of 'five to two bar one.' This is a holiday to all, where business enters not.

The chief event of the day to the naval world was the navy flat race, for which seven entered; our ship being represented by two. The jockeys' costumes caused some amusement, but, on the whole, they were very creditable. The signal was given, and all got off well together. As they approached the winning-post the excitement equalled a Derby Day, and we had the gratification of seeing our two representatives come in first and second, the remainder nowhere.

There was a navy hurdle race over six flights of

## ESQUIMALT HARBOUR.



hurdles, which was won by Lieut. W., of the 'Scylla.' Another race, causing great amusement, was contended for by blue jackets and marines. A great number started, but few arrived, as several of the horses bolted with their riders. One youth, coming into violent contact with a tree, was picked up insensible. Jack, however, seemed rather to like it. Who had won was disputed. It lay between a marine and a boy. There was a good deal of hard swearing, and the stewards coming to the conclusion there was little to choose between them, whether as regards riding or telling the truth, divided the stakes.

That evening, according to custom, Governor Musgrave gave a ball at Government House—an event which is looked forward to for some time. On this occasion everything went off most successfully and agreeably. The 'Zealous' band was in attendance, conspicuous for their martial appearance and manner of playing. An excellent supper proved only a short interruption to dancing, which continued until an early hour, when broad daylight witnessed the 'farewell' of those who lingered yet, and then assisted them home.

A naval regatta at Esquimalt took place next day, to which point there was a migration from Victoria in steamers and various descriptions of boats. The presence of the Flying Squadron, all dressed with flags, when combined with other craft, also displaying bunting, gave the harbour, perhaps, a gayer appearance than it has ever assumed in present memory. The

races were many and varied. Nearly every ship claimed one, if not more prizes. Ours, however, claimed first place in number, and gross amount of money value. Perhaps the most amusing race was that of copper punts, propelled by shovels; the various crews apparently had endeavoured to outvie each other in fantastic garb, with blackened faces. From greater experience of this species of boat, our puntsmen must have won; but, unfortunately, they allowed themselves to become a trifle overcome, so received anything but a prize.

From this regatta arose a match, which created great interest in the two fleets. It was a race between our barge and that belonging to the 'Liverpool,' flagship of the Flying Squadron. The course was about two miles and a half, and proved a most hollow affair. Our boat, after the first mile, drew well ahead, and, increasing her lead at every stroke, finally won with ease.

Our first cricket match at Vancouver was played against the 'Charybdis,' but we were beaten by nine wickets. Nothing daunted, after a little practice, we essayed again, and this time were successful, winning by ten wickets.

These matches were played at Colwood, about halfan-hour's walk through the woods, on the other side of the harbour. The ground is small, but pleasantly situated in an exceedingly picturesque spot.

Two other matches were played against the 'Scylla,' 'Ringdove,' 'Sparrowhawk,' and 'Boxer,' combined.

In the first, we won by four wickets, and played with nine men; in the second, we won by twenty-four runs. Victoria boasts a very good eleven, and our last match was against them; but they proved too strong, and beat us by ten wickets.

The copper of the 'Zealous' having become somewhat foul, it was determined to place her in the stream of fresh water at the mouth of the Fraser River, to see what effect it would have. It was also considered a good opportunity to visit the Island of San Juan.

We left Esquimalt on June 20, on a bright and clear day. On the right were the snowy peaks of the Washington Territory mountains, standing out distinctly against the deep-blue sky glittering in the sun; on the left lay Victoria, picturesquely scattered over a plateau surrounded by the fir-covered hills. A little further on we opened the Haro Channel, studded with many wooded islets. In the east rose, in majestic grandeur, Mount Baker, clothed in brilliant white; while, towering over the plains beneath, far distant in the south-east, might be seen the summit of Mount Renier, 140 miles off. As we advanced, the white buildings of the American camp began to show themselves, and, on nearing it, the star-spangled banner was flung out to the breeze.

Rounding the south-east end of San Juan we passed between it and Lopez Island, anchoring at 5 P.M. in a capacious bay, opposite the landing-place leading to the American camp.

A few words here about San Juan, and the peculiar circumstances under which it is inhabited, may, perhaps, interest those who do not comprehend the reason of its holding two standing garrisons, or on what grounds it is claimed by both nations.

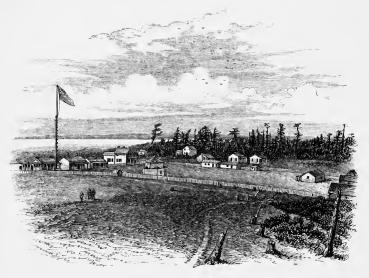
In 1846 the boundary between the British possessions and the United States west of the Rocky Mountains was determined, and the Island of San Juan was supposed to belong to Great Britain, the wording of the treaty being as follows:—'From the point in the forty-ninth parallel of north latitude where the boundary laid down in existing treaties and conventions between Great Britain and the United States terminates, the line of boundary shall be continued westward along the said forty-ninth parallel of north latitude to the middle of the channel which separates the continent from Vancouver Island, and thence southerly through the middle of the said channel and of Fuca's Straits to the Pacific Ocean.'

There is not the slightest doubt that the channel here alluded to was Rosario Channel, the only one then in use or supposed to be navigable. Subsequently the American Government claimed the 'Canal de Haro' as the channel meant, and assumed that San Juan belonged to the United States. Whilst the disputed point was still under discussion by the two Governments, a certain General Harney, of the United States army, in 1859 thought he would 'cut the Gordian knot,' and landed a military force and battery on the south point of the island, ostensibly to protect

American citizens from the depredations of the Indians, but in reality to obtain a footing in the island. United States Government pretended to disavow the act, but would not direct the withdrawal of the troops, determined, if possible, to get possession of the island in consequence of its strategical importance as commanding our route to the Fraser River and the north. How it will eventually be settled is most difficult to say, but I trust our Government will not give up San Juan, it being all important to us. All attempts to settle the question by arbitration, compromise, or otherwise, have hitherto failed; in the meantime there is a joint occupation by a company of British marines and a like number of American troops: the camp of the former being at the north extremity of the island; that of the latter on the south point near the site of their first encampment, whilst the distance between the two is not more than ten miles.

Immediately on anchoring an invitation was sent to the American officers and their families to come on board. No doubt it was a pleasant change to see new faces, for, as one of them quaintly observed, 'society there was rather jerky.' A large party of us from the ship visited their camp the next day. It is about a mile from the landing place on a piece of prairie plateau overlooking the Straits of Fuca. Officers' and men's quarters are enclosed in a quadrangle by palings. In the summer they drill regularly, but in winter, on account of the climate, they are not able to do much. There is, however, excellent deer-shooting on the

island, and one of our marines was said to have killed over one hundred to his own gun in one year.



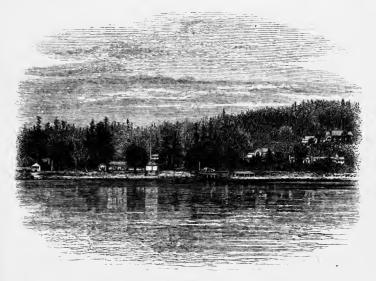
AMERICAN CAMP.

After returning on board we weighed and proceeded through the middle channel between San Juan, Lopez, and Show Islands to the north anchorage. This channel is narrow in some places, with one or two dangerous rocks; the current also is rapid, but the channel is perfectly safe for a steamer.

The scenery of these islands has much sameness in extensive forests, with small stretches of prairie land, and high bluffs overhanging the water.

The English camp is picturesquely situated at the head of a beautiful little land-locked harbour. The officers' quarters—neat wooden buildings—are on the

slope of the hill surrounded by gardens. The commandant's house is about two hundred feet higher up: a well-constructed building, with offices complete and a well-filled garden, while an extensive forest close to it is an inexhaustible resource for timber and fuel.



BRITISH MARINE BARRACKS.

The men appeared perfectly contented and happy in this secluded spot, and although their quarters are hardly equal to a good barrack, they are fairly comfortable. Every year improvements are being made. Already they have a reading-room, library, and recreation hall. Fruit and vegetables they grow there, and other articles are sent over from Esquimalt once a month.

In compensation for the banishment they have to

undergo both officers and men receive double pay, but none of the men have their wives with them. There is easy communication in fine weather between this island and Vancouver, and the telegraph wire to San Francisco and Europe passes through the camp.

Leaving San Juan we proceeded in the direction of Nanaimo. Steaming inside Pinder Island by Swanson's Channel and through Active Pass (a narrow, tortuous strait, two and a half miles long and about six hundred yards broad) between Mayne and Galiano Islands, through which the tide runs at times with great velocity, we entered the Straits of Georgia nearly opposite the Fraser River. Passing Holder and Gabriole Islands we anchored that evening off Nanaimo. Here is the only coal-field which has hitherto been discovered, or at all events made available on the North Pacific coast, and only one pit up to the present time is being worked. The quality of the coal is good for steaming purposes, but burns quickly, being soft and bituminous. From the borings made, there is no question but that far better coal is to be found in the neighbourhood.

The small town of Nanaimo contains about one thousand inhabitants, principally miners and their families. A stipendiary magistrate watches over this community. This gentleman informed us that the fishing was magnificent, but at this time, owing to snow water being on the river, the trout were not running. In fact, this is the only dead season of the year.

Early on the morning of the 26th we weighed for

the Fraser River, which was reached about 11 A.M., and anchored near the light vessel at the mouth.

This river is the largest in British Columbia, taking its rise in the Rocky Mountains, and having a course of more than eight hundred miles. It is navigable for steamers of considerable burden up to Langley, forty-three miles from its mouth. Above that—to Yale, forty-two miles beyond—steamers can ply, but of light draught, with powerful engines, and propelled by a stern wheel. Beyond Yale the river becomes too rapid for navigation. The Fraser River is the high road to the gold mines, and its tributaries are pathways branching off right and left.

A party of officers, including the writer, embarked in the gunboat 'Boxer,' to go to New Westminster, twenty-eight miles up the river. The navigation of this part is difficult, on account of numerous shoals and constantly shifting sands, so that buoys supposed to mark the channel cannot be relied on. They are also frequently washed away. H.M.S. 'Tribune' got aground here, and was nearly lost, having laid for several weeks in her tenacious bed.

We were fortunate, and threaded our way in safety with a rising tide. A large tract of land stretches along the banks of the river, upon which graze large herds of cattle. As numerous swamps and creeks intersect these plains, glorious wild-fowl shooting can be obtained in autumn and winter. The stream of the Fraser at this season, when swollen by the melting snow, runs at the rate of four to six knots an hour,

with turbid water. About six miles below New Westminster low pasture land is succeeded by dense pine Then the town appears in sight, It lies on the north bank, and has rather an imposing appearance, with its large warehouses, cathedral, and other places of worship. Until Vancouver Island and British Columbia were united it was the seat of government, which was then transferred to Victoria.

Landing, we found but two streets, running parallel to the river; but although the town was laid out on a grand scale when the country gave great promisethough it boasts a cathedral, public library, offices, warehouses, and churches of various denominationsthese expectations have not yet been realised, and grass growing luxuriantly in the streets is a more truthful index to its prosperity. When the gold tide ceased to flow, New Westminster, like Victoria, received a serious check, from which it has hardly yet recovered.

The Governor's house, which we visited, is about a mile and a half from the town. It is a capacious, comfortable building, with extensive fruit and flower gardens, and surrounded by magnificent cedar and maple trees. Preparations were being made for the Governor's reception, who had gone to San Francisco to be married.

At 3 P.M. next day we embarked again, and steamed down to the ship a good deal faster than we came up. A good look out is required to be kept for snags, which, pointing up stream, are dangerous to run against.

The Fraser River is celebrated for its sturgeon and salmon, and many tribes of Indians obtain their winter supply of food from this source. There is also a delicious little fish called the 'eulachin,' or 'candle fish,' caught on this coast. It is about the size of a smelt, and so fat as hardly to bear frying. The Indians use them for candles (from whence its name) by simply running a wick through. From them oil of a very fine quality is obtained, said to be superior to cod-liver oil.

Sturgeon are most numerous both on the coast and in the river. They ascend to an incredible distance, overcoming difficulties which will baffle salmon.

Their habits are little known, as they seem to live equally well in fresh and salt water. Their roe furnishes the delicious caviare so celebrated in Russia; the quantity of roe in the female fish is almost fabulous. Indians kill the sturgeon principally with spears, and we observed several canoes at the entrance pursuing this mode of fishing. A spear seven or eight feet long is used, with a barbed bone head. A long line is attached and coiled down carefully in the canoe. One Indian paddles, while the other drags the point of his spear upright along the surface of the mud. By practice he knows the touch of a sturgeon, and immediately strikes. Then great skill is required to prevent the frail canoe being upset by a large fish. Canoes hunt in couples, and assist each other in the event of a heavy fish being struck. An excellent description of sturgeon-fishing is given in Ind's work on 'The Natural History of British Columbia.'

The Admiral being anxious to see Burrard's Inlet, which is a few miles to the north-west, a party of officers proceeded there in the 'Boxer.' The entrance is through a narrow passage, at low water not above a cable wide, but with a depth sufficient for any sized vessel. Passing this narrow, the inlet expands into a fine harbour, where are two fine saw-mills, which export a great quantity of timber. Passing a second narrow four miles higher up, the inlet is divided into two branches. The northern one runs for about ten miles, with an average width of one mile, into the very heart of the mountains. Its scenery is grand, but it is useless as a harbour, having a too deep and irregular bottom. The other fork runs about three miles to the south-east, rather more than half a mile broad, and forms a fine harbour called Port Moody, with an average depth of six to seven fathoms. Magnificent timber abounds in the vicinity.

Some day the stillness of the scene will be broken by the bustle of commerce. For here, in all probability, will be the terminus of the great projected railway from Canada. It has all the capacity and convenience necessary for a commercial port—space, depth of water, a considerable rise and fall of tide for forming docks and basins, with proximity to the coal mines of Nanaimo.

The following morning, in company with the 'Boxer,' we returned to Esquimalt, where, shortly after, the 'Chanticleer' arrived from Callao.

Before leaving Vancouver, I will attempt to give

some description of the shooting and fishing that can be obtained without difficulty; but as it was April, and consequently not the shooting season, more detailed remarks on that subject must be left for another visit. Deer of more than one kind abound in Vancouver Island. The noble Wapiti, or Elk, far surpassing in size the monarch of our Scotch glens, and others classed under the head of black-tailed deer. The former has retreated before civilisation, but the latter are to be found in the neighbourhood of Esquimalt. Both are in best condition late in autumn. There are also bears, panthers, and wolves, for those who despise more ignoble game.

The feathered game consists of the blue, willow or ruffled grouse, and quail. The blue grouse is about the size and resembles in appearance the grey hen. The ruffled grouse is smaller, and a bird of beautiful plumage. These inhabit the woods, and when flushed, perch on the branches of trees, affording but poor sport. The male ruffled grouse gives out a peculiar drumming sound, which may be heard at a great distance. But it is most difficult to find out on which particular tree they are perched, of such a perplexing nature is the sound, while a charge of shot does not dislodge them unless hit. The Californian quail was introduced a short time back, and is increasing rapidly. Besides these purely game birds there are, in winter, swans, geese, and numerous kinds of ducks, teal, and widgeon: also common and jack snipe.

Leaving this subject for the present, let us turn to the fishing, and commence with

#### SALMON.

This king of fish abounds on the coasts and rivers of Vancouver. Their numbers are almost incredible, and they form the staple food of many Indian tribes, with whom a bad salmon season means simply starvation. There are several distinct species of salmon, as many as seven, at least, so it is said, though I doubt there being more than four or five.

They ascend the rivers, and immense numbers, after spawning, never get back to the sea, particularly where they ascend to a great distance in large rivers, fighting their way over almost insurmountable obstacles.

The Indians say only the old fish die, but that would not account for such a large number that perish. I infer, therefore, that they get thoroughly exhausted by travel and spawning, as they are believed to take no food after entering the river.

The great Indian fishing season is autumn time, when rivers literally swarm with fish, pushing their way up every small tributary. Wading across shallows at this season a person is liable to be upset by them (this is no fable). The Fraser River salmon which I saw were large, probably 30 lbs., short and thick, with a bull head. Spring fish are the best in flavour and quality.

In May, June, and July, when bays and harbours along the coasts abound with shoals of small fish resembling herring fry, salmon follow in pursuit. At this period I enjoyed good sport in Esquimalt, trolling with a spoon bait. In two or three hours I have caught as many as eight or nine fish, averaging from four to nine pounds (some of twenty pounds). These fish are not our English salmon, but have spotted tails, and in my opinion are a species of sea-trout. Salmon of Vancouver Island, or British Columbia, will take neither bait nor fly.

### TROUT.

In the neighbourhood of Esquimalt are a number of small lakes abounding with trout from a quarter of a pound to three pounds. Almost every lake has a trout peculiar to itself, perhaps only differing slightly, but still differing. In some they will eagerly rise to the fly; in others they will only be tempted by worm, minnow, or spoon bait. They also differ in colour, flavour, and condition.

Esquimalt are Prospect Lake, nine miles, Swan Lake, four miles, and Pike Lake, three miles. There are also many other small lakes in the vicinity. Of those mentioned above, Prospect Lake has the finest trout, averaging from three-quarters of a pound to two pounds weight. They resemble the sea-trout, with delicate pink flesh; on a balmy day, with a ripple on the water, as many as eight or nine dozen may be killed with the fly. This lake has certainly the prettiest scenery: its banks overhung with heavy timber, with rocky promontories here and there projecting into the dark, deep water, from whence a cast may be had. But the fish-

ing is principally from a boat, as it is at all the lakes. If wishing to make a stay of two or three days in this locality, comfortable quarters may be had at Steven's Inn, two miles from the lake; or you may construct a rude hut on the banks and live there very pleasantly with a companion. Flies, about the size of the seatrout fly and of varied hue—the brighter the better succeed best. When these fail bait must be used to lure the fish from his weedy bed. Swan Lake is much smaller, fringed all round with tall reeds, and of gloomy appearance. The trout are as large if not larger than those in Prospect Lake, but not so fine in quality. The fish in this lake are very uncertain, some days taking the fly readily, and even rising sometimes when there is not a ripple on the surface. Another day the whole afternoon will be spent throwing the fly without the slightest response. For this reason it is not so much fished upon as others.

Pike Lake is a pretty little piece of water, abounding with trout, but mostly of a smaller size. The characteristics of Beaver Lake, not far from Prospect, are similar to those of Swan Lake.

For these lakes April, May, and June are the best months, though on genial days fishing may be had nearly throughout the year. In a long salt-water creek called 'the Gorge,' running up from Victoria, fine seatrout may be caught at times, but they are fickle.

On a future occasion I hope to supplement these remarks with new matter concerning Vancouver Island, and give a further insight into all that now has been so imperfectly sketched.

## CHAPTER IV.

LEAVE VANCOUVER AND ARRIVE AT SAN FRANCISCO—WAR IN EUROPE—
ITS EFFECT ON SAN FRANCISCO — DANCE ON BOARD — CRICKET — THE
THEATRES, ETC.—THE LOSS OF THE 'CAPTAIN'—EVENTS IN EUROPE—
HOSPITALITIES ON SHORE—SOCIAL LIFE IN SAN FRANCISCO.

War news always has been and always will be accompanied by uncertainty and excitement, arising from the mere possibility of war with its likely results, and from the probability or otherwise of your own country being drawn into the fray. Thus it was that these two ingredients had taken possession of the minds of us all on board the 'Zealous' when we left Vancouver Island in July 1870. The war cloud even then could not be said to be larger than a man's hand, considering that the fact of two civilised nations like France and Prussia about to wage war upon so slight a pretext seemed highly improbable. However, the cloud, which had in the meantime been rapidly increasing in density and assuming darker hues, had actually burst by the time we reached San Francisco, making uncertainty certain, but increasing, not allaying, the excitement. 'War in Europe' was the cry that greeted us from some shore boat as we steamed through the Golden Gate on July 20, six days after we left Vancouver, and the cry re-echoed through the ship from one end to the

other with amazing rapidity. Still more startling was the postscript, 'England likely to be drawn into it;' though by this time we should know that no war can take place in any part of the world without its being said, with or without foundation, that England would certainly, either through her feelings or her necessities, have to join one of the two contending parties. But the brain of man when disordered by excitement is apt at once to believe what in his calmer moments he would put aside as impossible; which inclination to belief is increased if there is any desire in the heart that such a thing should be. And it was not till the papers which were handed on board had been greedily devoured that we were certain of being in a state of benevolent neutrality.

The effect of this news was to give rise to a variety of feelings. Amongst them I am sure was regret at being so far from, if not the actual din of war, at any rate the stormy rattle of hourly as well as daily newspaper correspondents. The tone of the American papers on our arrival, and for some days after, seemed to be a prophetic one, as in every paper this sentence appeared under the war column: 'A great battle imminent.' At last the affair of Saarbruck broke the spell, and the armies of the great military power in Europe seemed once more to have started on a glorious career, so that opinion in San Francisco as to the ultimate result was very equally divided; being formed more by personal sympathy with either nation, rather than by a knowledge of the capabilities and resources of

each. So also to some the now celebrated telegram concerning 'Louis' had a ridiculous and even childish sound; while others saw in it simply a characteristic trait of the national failing, which would attribute so much influence to a few bombastic phrases loosely strung together. In the commercial city of San Francisco war news was turned into a means of filling the pockets of newspaper authorities generally, between the French and Prussian sympathisers. It was quite a common occurrence to see a placard posted up announcing a great Prussian victory, whilst a few yards farther on was a complete French victory and annihilation of the Prussian army. But every now and then came such undoubtedly reliable news-even through the dense cloud gathered round it by the French-of a great victory, but acknowledged only by the latter in so far that they did not lay claim to any great success, that there was no use denying it to the Prussian arms, and those who sided with France were, as time moved on, and Prussian armies moved towards Paris, reduced to saying like the rest of the world, 'Who would have thought it,' and to admiring and wondering at the masterly way the Prussian armies rolled steadily across France. The consequence of all this mass of contradiction was that between the interval of our English papers a general feeling of disbelief in everything seemed to settle down on all on board. Not so those on shore. The intensity of feeling increased as the news on both sides rose and fell with the tide of war, and as nearly half of the population are Germans, Irish

forming a large portion of the remainder, which latter universally sided with the French, arguments were often enforced by blows, leading occasionally to street rows. But considering all things, the city was wonderfully quiet, a mutual feeling of sympathy and consideration for the feelings of the other doing what no number of policemen and only an army could do in the event of a riot between opposition factions numbering so many followers.

Having telegraphed our arrival to the Admiralty, we received orders to remain at San Francisco until further notice, so that, whilst affairs remained in a state of uncertainty, should anything take place which directly concerned us, we were in telegraphic communication with England. Accordingly our minds began to reassume their natural calm, and we gradually settled down to a contented waiting for events, determined as far as possible to pluck the golden apple while within Therefore not many days elapsed before a dance, long anticipated and organised, took place on board. That the result should be worthy of the occasion, we had invoked the aid of all our friends, by whose liberal kindness we were enabled to turn our ship into a garden of Eden, and prepare a surprise to the many Adams and Eves who were to revel midst its Arcadian bowers. But to descend from poetry to plain matter-of-fact prose. Everybody, to the number of some three hundred and fifty, having arrived on board, conveyed alongside in a large steamer, the word was passed that lunch was ready, when, quickly descending to the deck below, we found everything that an exhausted nature and a thirsty soul could desire laid out upon two long tables constructed for the occasion. Louis XIV. used to say, 'He who eats well works well; ' if he was right—and he was a good judge these tables soon bore ample tribute to the industry of their surroundings. But as papers say when reviewing great public efforts: 'Where all strove with success to shine it would be invidious to pick out any more deserving of praise than the rest.' Dancing went on with great spirit until 7 P.M., when the steamer came alongside again, and farewell had to be said, fain though we were to prolong the scene unto a later hour. chaperones, not seeing it in the same light, asserted their rights, and shortly afterwards the steamer, with her precious freight, steamed slowly on shore, not before showers of bouquets and the long-kept-up cheering showed how mutual was the pleased sensation and good-will between guests and hosts.

Our old adversaries, the California Cricket Club, soon found out our arrival, and at once challenged us to again try conclusions, which challenge we accepted, putting confidence in our powers after the practice we had had at Vancouver. The result proved we were right in that confidence, though it proved an exceeding close game. The first innings they made eighty-seven, and we followed with eighty-six; then they again went in, and made fifty-nine, leaving us sixty-one to beat. When the five best men were out for thirty runs, the game seemed hopeless; but the tail proved trustworthy,

so that when the last man went in only one more run was required. This was obtained, and the match won. In the return match we again won, this time by two wickets.

Our time at San Francisco now began to draw to a close, as affairs in Europe daily took a more decided turn. We had seen the sharp engagement at Weissembourg, followed by the victories of Worth and Gravelotte: then the investment of Metz and Strasburgh, culminating in the final disaster of Sedan. Then, also, we heard of that fearful event which sent such a thrill of horror throughout England. For some time we could not credit such an occurrence as the loss of the 'Captain.' Alas! it proved but too true; while it was only slight consolation to learn that a boat had been picked up with eighteen men, whilst the remaindersome five hundred—had found their graves between the decks of the ill-fated ship. Such a catastrophe is without parallel in modern naval history, and all must hope it will not be allowed to sink into oblivion without a searching investigation.

Whilst these stupendous affairs were taking place in Europe we, forced to remain passive spectators, but not the less ready for any emergency, had been making the most of the opportunities afforded by a prolonged stay in a port possessing so many advantages denied to other places, and contrasting so pleasantly with the monotony of long sea cruises. Courtesies between ship and shore had been freely interchanged, and a feeling of genial cordiality sprung up, undisturbed by

the diatribes of demagogues or abusive leading articles on the other side of the Continent.

There is no doubt that the pleasure of our stay at San Francisco was much enhanced by the kindness of the members of the Union Club, who, making us honorary members, and placing the benefits of their commodious building at our disposal, supplied a want which it would be difficult to estimate too highly; for which privilege we were indebted, in a great measure, to our worthy representative and consul, Mr. Booker, who we found ever ready, by word or deed, to give us his good offices, especially when, as strangers, we first arrived; as was also his coadjutor and vice, C. Mason, to whom we are so much indebted for numerous acts of kindness.

Our hospitable friends, Mr. and Mrs. W., still continued at Oaklands their charming afternoon dances, which were numerously attended. A large ball was given by Mr. Ralston at his country-house in San Mateo, where General Sherman was the guest of the evening. This entertainment was conducted on a scale of great magnificence, and pronounced to be, by all who attended, most successful.

But by this time we received an intimation from home that we might proceed on our way south. Accordingly a day was fixed for our departure, which fact necessarily becoming known to the good people on shore, many of the prominent citizens, principally members of the Pacific Club, determined to give us a farewell ball, in order that we might carry away a

pleasing recollection of San Francisco. This ball accordingly came off the evening before our departure, at the Pacific Hall, a spacious building, well adapted for the purpose. All the arrangements were made with that completeness and, when anything is taken in hand, that indifference to expense peculiarly a characteristic of the American nation. We had supplied a number of flags for decorating, which, when well arranged, have always a very handsome effect. The band was almost hidden in a beautiful arbour, formed with lofty plants and shrubs, covered with blossoms of every hue and fragrance. Another band was in a gallery above to discuss choice selections in the interval of the dances. Alas! now, how can I describe the many fairy forms that keep flitting across my view? Am I to take a page out of the 'Chronicle,' and tell you how that Mrs. —— was dressed in a magnificent blue-silk dress, with sweeping train, low neck, and hair à la grecque; or, how that the graceful figure of Miss —— was shown to great advantage in a white moiré antique, panier overskirt, cut in points, trimmed with roses, hair tastefully arranged à la Pompadour—and so on to the end of the column? No, let us draw a veil over the sacred precincts of the toilette chamber, and admit that art had but assisted Nature in producing so much beauty as was here assembled to bid us farewell.

The worthy gentlemen who had invoked this gorgeous pageantry meanwhile vied with each other in seeing that none were left unprovided for, and soon all

feet were busy; the variegated uniforms, naval and military—for many officers of the American flagship 'Saranac' were present, as well as several of the military—augmenting the gayness of the scene; and when supper, which was of the most sumptuous description, commenced there could be no two opinions as to the entire success of the evening.

Fain would I linger over this page and prolong the scene, but farewell has to be said. Before proceeding, however, on our way south I will say a few words descriptive of society in California generally, and San Francisco especially. Perhaps in no part of the world is there less restraint, less formality, less stiffness; all may do nearly as they like. Life is very public. The majority live in hotels and large boarding-houses. This way of living has its advantages and disadvantages. The great charm of a home is lost; there is not the sacred attachment to one spot, like in England, and girls by going into society so young as they do often become prematurely old. At fifteen and sixteen they commence to receive at home. You can become very intimate with a young lady without ever seeing her parents. It is not thought anything out of the way for a young man, if well known, to go with a young lady to the theatre without a chaperone. There is no doubt such a privilege may be carried too far, and discrimination in permission by parents is required. But this system has several good points to recommend it. It tends to make all more natural, and that in a girl should be nearly, if not, the first consideration. Again,

in placing fewer social barriers between the young of both sexes a way is opened to many friendships, which may, or may not, lead to a closer tie. But fencing a young girl in on all sides with restrictions, obliging her on every occasion to be cold and reserved, making it evident that all men are wolves in sheep's clothing, and curtailing liberty of mind and body, often has the effect of making the former dwell inwardly upon many things which in a freer mode of treatment would never find ingress.

The line of demarkation between the various strata of society in California is not clearly defined, and yet there is something more than a money qualification required for admittance, which everyone recognises. In a democratic country it cannot well be name, or family; it is, perhaps, more correctly education and position, though nowhere in America are all other considerations scorned.

Many of the men of California, who came there at one time poor and friendless, now hardly know how rich they are. It is essentially a money-making country, whilst for reckless speculation Californians are pre-eminent, whether it be in mines, lands, or stock. They seem to live in an atmosphere of excitement, ever engrossed in business; one day poor, another day rich—losing everything, or making a fortune; but equally ready to stand drinks all round.

For generosity they have no equals. The last half dollar will be expended on a passing acquaintance, in whom it would be considered a great insult to refuse a

drink, or even to hint at paying. But rarely is a man reduced to such a low ebb. Money is plentiful in San Francisco. Even the conductor of a street car receives ten shillings a day; likewise he who keeps the streets clean. Wages are high; but living, and all articles of necessity, are proportionately expensive. A strong spirit of independence rules throughout the community. A shopman will when his work is over meet you on perfectly equal terms, though never offensive like the British 'Arry.' That type is never met with in America. His shop demeanour, too, is very different; no bowing and scraping, washing with invisible soap, which is carried to such a painful extreme in England. In America the extreme of independence is perhaps run into, but of the two I prefer it. Always respectful, it is simply an air of indifference whether you buy anything or not, and a fixed price which cannot be altered. Their manner always appeared to me to be that of men engaged in an occupation uncongenial to them, but forced into it by circumstances. They carried an air of expostulation in their faces against being forced into civility.

Lower down, this independence is more amusing. I remember the first time of landing in San Francisco a party of us took a carriage to go a short distance. On asking the fare we were told it was five dollars. Remonstrating against this extortion, Cabby replied, 'Well, gentlemen, guess we won't bustle about five dollars; come and take a drink with me all round.' And so it is, drinks all round all day. No man thinks

of taking one by himself, but always asks his neighbour to join.

To lead this life of excitement stimulants are required. As a rule, I should not think Californians are long-lived; old men are seldom seen. 'Tis the pace that kills, but it has great fascinations, and few care about leaving the country for good; while many who left have returned, unable to live without that excitement which pervades the atmosphere and impregnates the whole vital framework.

California has been celebrated for its street duels, and though now nothing like the number they used to be, they are not uncommon. Whatever was the cause then, now I think they are simply the effects of ruffianism and rowdyism. This part necessarily is a refuge for many criminals who might advantageously be hung, but here they flourish undisturbed. No law prevents a man from carrying a revolver; in fact, everyone does in self-defence, consequently there are a great number of homicides. Two men are drinking together, and have some words. They immediately draw their weapons and exchange shots. One probably is killed. If without pistols, they agree to go home and get them, then shoot directly they see each This is called 'shooting on sight.' During our stay one noted character came to grief that way. quarrelled with a man who had no pistol, so generously told him to get it, and he would shoot him the first time he saw him again. The other man took his advice and got his pistol. Then he thought the best thing he could do was to shoot the other man before he saw him. Accordingly he stationed himself in a doorway. As his friend passed he shot him dead. He was tried for murder and acquitted.

It is curious to see the streets when these things take place. Two or three shots are heard in rapid succession. Immediately everybody in the streets get in the doorways, as if a shower of rain had just come on. Not a soul is to be seen. After waiting a few minutes, and all is quiet, they emerge, and walk on as if nothing had happened.

Such are a few of the phases of life in San Francisco. At a future time I may add a few agricultural details about California; so for the present will bid adieu to San Francisco, the pain of parting tempered by the thought that perchance we shall meet again.

# CHAPTER V.

SAIL FROM SAN FRANCISCO FOR PANAMA—AMUSEMENTS ON BOARD AT SEA—ARRIVE AT PANAMA—RIOT AT TABOGA—BALL TO SIR CHARLES BRIGHT—CHRISTENING ON BOARD—LEAVE PANAMA AND ARRIVE AT PAYTA—A TRIP TO THE RIVER CHIRA AFTER ALLIGATORS—SAIL FROM PAYTA AND ARRIVE AT TOMÉ.

September 28.—It would be difficult to find a more uninteresting passage, or more tedious, than that between San Francisco and Panama. Well may this be called the 'deserted ocean.' To see a ship is as much a novelty as it is to see land. Weeks even often pass by without a bird appearing, such seems to be the inequality between space and life in this sea, while our knowledge of the fishes in it does not go much beyond sharks and porpoises. In this direction there is a fine field for exploration, to reveal some of the mysteries of the deep, and settle many undecided points concerning the numerous islands which dot its vast surface. Talking of islands, there are several spots in this ocean (as indeed there are in the others) marked thus? meaning that it is doubtful whether they exist or not, though reported at some time or other by a vessel as an island or rock. It would be an excellent mission for any ship to visit all these in succession, and determine once for all whether they exist or not. Last night we passed over one of these spots marked doubtful on the

chart, but saw nothing of it. It is generally considered safest to steer straight for these spots, as ships have searched for them in the position assigned without having been able to find anything; so, if they exist, save in the imagination, will most probably be anywhere but on the spot marked. There are many ways of accounting for these, such as ships being out of their reckoning, and reporting other islands as new discoveries, &c. Since leaving San Francisco a fortnight ago we have had very light winds, and made little progress. To relieve the monotony, we recommenced our lectures by hearing an excellent one from C\_\_\_\_ on Life Assurance. By it we were led to conclude that Assurance Companies are charitable institutions formed solely (?) for the purpose of befriending the poor man who with a wife and large family looks forward to his own decease. Another evening saw the opening of the Negro Minstrels, an ever favourite amusement on board ship amongst the sailors. Our troupe made a very creditable beginning, possessing originality, if not wit. All these little amusements on long cruises are very beneficial, passing away time, and being some variation to daily sea routine.

This morning we sighted Clarion Island, one of the Revilla Gigedo group off the entrance of the Californian Gulf. It has a reputation for an abundance of sharks and sea-birds. From its appearance and peculiarity of formation it is evidently volcanic, presenting a series of rugged peaks, without a tree to be seen.

October 18.—After passing Clarion Island we began



to approach that region where calms are said always to exist, and we were to pass through about the broadest part. To add to the winter of our discontent, it was the rainy season. The showers are so heavy, every aperture must be closed, and all gasp for breath. Nevertheless, there was a good attendance to hear a lecture on Charles I. from W——; and the following week one from the Admiral on the Franco-German war, up to the capitulation at Sedan. Sighted land yesterday—two small islands a short distance from the mainland of Central America; and this morning passed Point Mariata, so that we shall arrive at Panama tomorrow.

October 24.—Arrived at Panama on the 19th, which place we found roused out of its normal state of lassitude by the coming of Sir Charles Bright to lay a telegraph-wire between Aspinwall and Jamaica. celebrate this event, a ball had been planned, so our arrival was opportune. Went over to the Island of Taboga on the 22nd in order to coal. Yesterday this spot was the scene of a combat à l'outrance between about fifty of our men on liberty and the inhabitants. all like cases, it is difficult to find out who initiated the movement. Both parties were probably to blame. They, for selling such a villanous compound which they call liquor, but which is really poison; and Jack for being somewhat inclined to domineer over and despise all those who are not as white in colour as himself. Anyhow, a row took place, sticks and stones were freely used, and several of our men came on board

badly hurt. But the unfortunate part, and what put a serious aspect on what was otherwise rather a ludicrous affair, was that the 'Alcalde,' or head man of the island, came to stop the fighting, but getting between the parties, was struck on the head by a stone, and died from concussion of the brain a few hours afterwards. Being an official, there was, of course, some noise about it; and the Governor of Panama came over, and with the Admiral and our Consul proceeded to investigate the matter. There was a good deal of hard swearing, and the end was that they demanded 1,000l. for his widow, and 50l. for damage done to property. This was of course absurd, for many reasons; but we made a subscription amongst the officers and men, and presented the widow (?) with 50l., which apparently satisfied all parties.

The inauguration of laying the shore-end of the cable came off at Aspinwall, when a statue of Columbus was unveiled. The ball came off the same evening, of which the following account is given by an eyewitness:—

'In consideration of the services rendered by Sir Charles Bright in superintending the laying of a telegraph-cable between Central America and Jamaica, the leading inhabitants of Panama determined to ask him over and give a ball in his honour, as also to commemorate the auspicious event. The "Zealous" arriving opportunely, invitations were sent to her officers, with a request for the use of our band on the occasion, which was readily granted.

'So, on the evening, a large party proceeded on shore, and made their way to the Assembly Rooms, which we found brilliantly decorated and illuminated. past ten, headed by the Admiral, we entered the ballroom, and after paying our respects to the President, had time to look about and survey the scene. room was large and well-lit, with seats all round, whilst the band played outside on the verandah. The generality of the ladies were not, indeed, remarkable for beauty; but nevertheless there were several pretty girls, perhaps true descendants of Andalusian ances-These belles were surrounded by a numerous circle of admirers, some with the strongly marked features peculiar to the chosen Caucasian race, others fully attired in military costume, showing them to be officers of the great Republic!

'The dancing went on with great spirit until an early hour, broken only by an excellent supper. Our band, with their worthy master, exerted themselves beyond praise to respond to the call made upon their powers. This they did unto the end of the ball, when many of these talented musicians were found to be overcome by their exertions and the heat of the weather. But Professor H——, with great foresight, provided suitable accommodation by consigning them to the care of the Republic, which snugly incarcerated them in the "Calaboose," or town prison, where it is to be hoped soothing slumber effected their recovery on the morrow.'

The only other event of importance, if I may dignify it by that name, which took place at Panama, was a

christening on board, followed after the ceremony by a dance—the reason of the former being that there was no Protestant minister then at Panama.

A steamer brought the party, consisting of about fifty ladies and gentlemen, from Panama; and at 2 P.M. the ceremony was performed, being thus described in the *Panama Mail* of the 27th inst.

'The religious ceremony was performed on the quarter-deck of the splendid flag-ship, in the presence of the Admiral, his officers, and all the guests, with a solemnity not to be surpassed in any church in the world. In sight of the great Armstrongs of war, the auxious parents devoutly bent before the baptismal font, and saw their first-born initiated into that religion, the divine essence of which breathes peace. It was an interesting scene, one that had not before been witnessed on board the "Zealous;" but the gallant Admiral expressed his willingness always to make the ship available on such occasions, and intimated that the worthy chaplain would be ever ready to lend his services, gracefully insinuating that marriages were not forbidden on board.'

November 9.—Left Panama on October 30, and steamed down the coast without incident of much interest. One day we were beset by sharks, so amused ourselves by trying the effect of rifle bullets. But they have such tenacity of life as to receive several bullets without seeming to feel them. One was caught and hauled on board. It measured about ten feet, and life was extinct only on the body being cut to pieces.

For the last week we have been steaming slowly along the land, having a good view of the coast of Ecuador. The scenery here is certainly fine, from the dense masses of foliage and plants of all descriptions growing most luxuriously in a wild state. We also passed the Esmeralda River, considered at one time a great field for emeralds and diamonds, but which idea has long since been given up. Not that, probably, precious stones are not here, for we find in this continent, wherever civilisation has penetrated, hidden treasures are revealed, but because the climate and desolation are such that it would daunt the greatest energy. Only one settlement did we pass the whole way down, and that was a Dutch village. Yesterday afternoon we arrived at Payta, a small town in the northern part of Peru, but deriving some importance from being a calling place for mail-steamers, and the seaport town of Piura, about forty miles inland. There is nothing picturesque about the appearance of Payta; sand only is to be seen on approaching, and its sole recommendation is a good harbour.

We observed, on entering, two or three large merchant ships, full of coolies from Macao, who were being landed on rafts. They will be taken down to Callao, and there most likely sold. This civilised slave-trade is very paying, but, to our ideas, worse than what we have expended so many valuable lives to put down on the coast of Africa. These unfortunate people, if not forcibly kidnapped, are morally so; entrapped by fair but false promises—generally when under the influence

of opium—and believe, though they don't know where they are going to, that it is gold-digging, or some other self-enriching process, but from which celestial dream they are speedily awakened. Paying a visit to the shore, I passed by the temporary quarters of these deluded wretches. From such a number having been crowded on board ship, many had lost the use of their limbs, while others appeared in a dying state from insufficient nourishment. At the distribution of a few cigars amongst the worst cases, great surprise and gratitude were manifested by signs, lifting their hands to heaven in a most significant and pitiful manner.

Payta, like most Peruvian towns, is dirty. The houses are built chiefly of bamboo and mud, the streets narrow, and the whole appearance of the town uninteresting in the extreme. Such was not the case in time gone by; for it is but 130 years ago since Lord Anson, when on his famous voyage round the world, hearing of the riches stored up in Payta, landed a party of men, sacked and burnt the place, sparing only two churches, the remains of which stand now—at least, the outer walls. Inside can be seen traces of the conflagration in the blackened remnants of ornament, but which are enough to show that the tale of riches is not untrue.

There is a small river, about twenty miles from here, abounding with alligators, and having other kind of shooting round about. I subjoin a narrative of the adventures of three, who were ambitious of obtaining a skin of that scaly monster of tropical rivers.

Alligators! By Jove, the very idea of seeing some, to say nothing of having a shot at them, was, indeed, a treat, after having been penned up on board ship for several weeks; so, hearing of the good sport to be had at the River Chira, twenty miles from Payta, a worthy trio determined to pay it a visit, in defiance of the many discomforts said to accompany such undertakings. Accordingly, having procured the necessary leave, we went on shore, with only rugs, guns, and ammunition, taking no thought for the morrow, as is generally the case with sailors on a cruise. ever, fortune favoured us—that sweet little cherub, who sits up aloft, did not on this occasion forget to look after the wants of 'poor Jack.' With some difficulty we procured three horses, and, once fairly mounted, were not long in getting well clear of the town, following the direction given us, to keep along the beach for about ten miles, till we came to an Indian village. The ride was not an unpleasant one—along a narrow path, overhung by lofty perpendicular cliffs of sandstone, with here and there a large boulder ready to free itself from mother earth, showing unmistakable signs of frequent landslips. By letting our little steeds choose their own pace—a quick, shuffling kind of amble—we reached the village in less than two Dismounting at the house of the Alcalde to refresh both man and beast, we enquired the way to the establishment of a certain Señor Cap-i-tan Gale, an Englishman who had settled on the banks of the river, and to whom we had been recommended to go.

Understanding our Anglo-Spanish, in less than a quarter-of-an-hour we were again in the saddle, accompanied by a 'nigger' for a guide, who rode 'pillion' on the strongest beast. Having heard that the person to whose quarters we were now bound had settled in these parts, we expected to find a large farmhouse-forgetting for the moment that we were in Peru; and, indeed, when, after riding over dreary miles of sand, passing occasionally the carcase of a dead horse or donkey—the latter a sight as rarely seen as 'a dead drummer'—we came to some fertile land, thickly wooded in many places, in the middle of which was a little shrubbery, having a gated entrance, we were rash enough to entertain ideas of there being some Miss G.'s, music, &c., after dinner. However, we were soon aroused from our reverie by sighting an ugly-looking house, built of bamboo, and by the yelping of dogs, followed by the appearance of a tall, well-built individual, who immediately welcomed us, and desired us 'to accept the poor hospitality at his disposal.' And very thankful we were, too, after our long, dusty ride, rough though our quarters might be; but our host, being a worthy type of the rough-andready old whaling captain, did all in his power to make us comfortable; and soon afterwards his wife (a native of Peru) prepared a goodly repast for us, in the shape of a stew of some kind, but of which we were too hungry to inquire the ingredients. Our bed consisted of dried Indian corn-shucks, spread on the floor, a great deal more comfortable than may appear, as we

were only awakened at dawn of day by the chattering and squabbling of some thousands of parrots and paroquets. The hut was only a stone's throw from the river; the ground all round, therefore, was very fertile, without requiring irrigation, consequently Indian corn and grain were plentiful, as also birds of all description. Further sleep being out of the question, we rose, and, shouldering our guns, strolled forth to see what we could find for breakfast. We had not to go far before our bag was well filled with wild doves, pigeons, grey squirrels, parrots, and a species of iguano, common to Peru, called a 'capaz,' all of which we knew would make a good stew; so, returning to our abode, we turned over the spoil to the old lady, who, with great alacrity, soon produced an excellent meal. Arrangements had been made for our visit to the mouth of the river the following day in search of alligators, in a large canoe, and, as it was our last day, we sent the horses on to meet us there, in order to ride home, as it would have taken two days to paddle back up-stream to the hut, whereas it only took four or five hours to come down. The latter part of the day we spent in preparing our guns and chattels. In the evenings the old skipper and his friend 'Joe' would entertain us with most wonderful stories of their whaling career, and hair-breadth escapes. However, he really was a splendid shot, and had been known to pierce an orange resting on the palm of his friend Joe's hand, at fifty yards, in the main street of Payta, before an astonished crowd of spectators. The British Consul is able to vouch for the truth of this, having been an eye-witness. His periodical visits to Payta used to cause his old wife no small amount of alarm as to his safety, as he generally returned under a 'heavy crowd of canvas.' Whilst we were there—in fact, the day before our trip down the river—our friend made one of these visits, and returned in a very amusing frame of mind, causing us much laughter the whole evening at his extraordinary stories.

The next morning we started in the canoe down the river, with the old 'skipper' and 'Joe,' and had not proceeded very far before we saw several alligators slip into the water at our approach, but, being so much the colour of the muddy bank, made it to the inexperienced eye very difficult to discern them. Presently we discovered, in the distance, a spit of land, on which were four or five young alligators basking in the sun. We at once made for them, but, to our disappointment, they all slipped into the water, except one. He was fired at, when about forty yards distant, and hit just behind the fore-shoulder, but it required another bullet to prevent him from wriggling off the bank and to put an end to his struggles. We at once landed, and one of the men from the canoe proceeded to get him ready for embarkation, by cleansing, &c. Whilst this was going on, we were all, with one exception, standing in the mud, looking at the prize, when, to our astonishment, three of the alligators were seen returning to land not many yards off, and one, bolder than the rest, advanced about ten feet out of water, when a well-directed ball laid him on his 'beam-ends,' breaking his fore-shoulder, and passing clean through the body. This being number two, we thought ourselves very lucky, and were quite prepared Several others were hit on the way downto return. stream, but they managed to roll into the water, and, of course, sunk. It was a grand sight, when at the mouth of the river, to see some hundreds of these big beasts swimming along, with only their eyes and nose above water. Landing, we found our horses ready for us, so, securing our alligators for the journey, with a bag of smaller game, said farewell to our worthy old host, and started for Payta, with many regrets that our short but pleasant cruise had come to an end.

It was very late before we got on board that day, as, during the ride back, one of the horses broke down, and positively refused to carry its rider, who had to dismount and share one of the others; then, by dint of blows, we managed to drive the poor tired-out animal on before us till we reached Payta.

November 15.—Left Payta yesterday for Concepcion. The mail came in on the 13th, but brought little news, except as regards the war—a telegram to say that Metz had capitulated, and Bazaine surrendered with 150,000 men. This disaster, no doubt, will alter the whole complexion of affairs, and go far towards strangling the slight hope the French had of shaking off the grip of their enemy. It is difficult to imagine a man surrendering such a large army without a battle,

especially when the Prussian army outside the walls could not have outnumbered them by much, if at all; only time can show whether the scarcity of food was such as to palliate a step which deprived France of a large body of men at a most critical time.

Concepcion, though not more than two thousand miles in a direct line from Payta, is considerably more so by the route that ships under sail must necessarily take in order to reach it, and the passage varies at different times of the year, according to the southeast trade-wind being more or less to the eastward, enabling you either to lay well to the southward, or else forcing you out from land a long distance before you are far enough south to pick up a westerly wind. So there are a good many opinions as to when we shall arrive; December 20 being considered about the day.

November 23.—For the last week we have had nothing but light winds, so made slow progress, but now are beginning to feel the trade-wind much stronger. This ocean is so vast that even now it can hardly be said that the winds in different localities are as well known as those of the Atlantic, more especially since our knowledge is based upon the experience of a certain number of vessels following more or less in the same path. That experience in this quarter has not, for several reasons, such a wide field as in the Atlantic. Consequently, peculiarities of wind and weather are often found here apparently opposed to all previous experience, and preventing any certainty of prophecy as to what may be encountered, but in reality only

another link which, if gathered like the rest, will complete our chain of knowledge of the vagaries of winds and currents.

In the way of amusement last Wednesday was a lecture from A—— on Charles I.—a defence of him, which led to some debate afterwards. The Minstrels gave a performance last night, and, under the able presidency of 'Massa Johnson,' kept up the reputation they had earned on a previous occasion, 'Bones,' as usual, being the chief contributor.

November 26.—Yesterday we had a very interesting incident to vary the monotony of our sea-cruise. the last three days we have been startled by the unusual sight of a ship, apparently a whaler. In fact we knew she must be a whaler by the look-out men at her masthead; so, knowing we were now approaching the whale country, kept an observing eye upon her. Yesterday forenoon we observed her send away three boats; she was then several miles to windward, so we were not able to make out much, except that we could see the white spray thrown up by the whales when blowing, therefore concluded they had got in amongst a 'school.' This proved correct, as in the chase they gradually closed on us till we could see everything distinctly. It was quite exciting. We saw the boat approach to where some six or eight whales were sporting, and, after a few fruitless efforts in throwing the harpoon, one was at last transfixed. Away he went, and away flew the boat, now one way, now They had gradually been approaching us

all this time, and were now quite close, so we took in sail in order to observe their movements better. Another boat had harpooned a whale, but lost it after a short chase. In the meantime, the first boat held on manfully, the whale evidently getting sluggish and exhausted, blowing up great quantities of blood and water, which tinged the water all round when he came to the surface. They were sperm whales of an enormous size—I should think quite forty or fifty feet long, and of great bulk. We were now right in the middle of them, and one boat was so close to the ship that they had to pull out of the way to prevent being run down, no doubt wishing us anywhere else. first whale was now nearly killed, but as they were gradually getting further away from us to leeward, we felt obliged to waste no more time, but proceed on our way with every wish for their success. Whaling is hard and dangerous work, requiring great caution in approaching a 'school' such as we have just passed; then skill and presence of mind to guide the boat after striking—a sweep of the tail would, if it struck the boat, send it fifty feet into the air. Fortunately, like other large animals, they do not know their own power.

December 9.—For the last fortnight we have been making good progress, so that by the 4th we had run out of the influence of the trade-winds into the region of 'calms.' But two days' steaming brought us into contact with a fine westerly wind, which we were not slow to take advantage of, and which is now carrying us along towards the coast of Chile.

Lectures, free and easy entertainments, and minstrelsy still continue to afford some relaxation at a time when one day differeth from another only in being somewhat nearer your destination. Were it otherwise, were these days replete with interesting incidents, such a journey as that from San Francisco to Concepcion would require a volume, instead of being without difficulty comprised in a chapter. It is this dearth of matter which renders it so difficult to make a journal interesting when it has to deal with the sea portion of our life.

December 15.—Anchored off Tomé in the Bay of Concepcion to-day after a fairly good passage of thirty-one days from Payta. Thus comes to an end the first part of our cruise in southern waters. This is our most southern point at present, and we shall proceed to work up the coast of this continent, until finally striking away to the far west, resting only from our labours for any period when snugly anchored in Esquimalt Harbour. Then after resting a few months, we shall go forth for the last time to visit fresh scenes, and follow a new track, until the time comes for the most welcome one of all, viz., to old England.

### CHAPTER VI.

ARRIVE AT TOMÉ — TRIP TO CONCEPCION—EARTHQUAKES—GO TO JUAN FERNANDEZ ISLAND—SELKIRK'S LOOK-OUT—ARRIVE AT VALPARAISO—DESCRIPTION OF THE TOWN—THEATRICALS ON BOARD—AFFAIRS IN EUROPE—A VISIT TO SANTIAGO—LEAVE VALPARAISO.

WE arrived in Concepcion Bay, and anchored off Tomé on December 16, where we found the 'Cameleon' awaiting us, having brought our mails down from Valparaiso, besides some officers come out from England to join the 'Zealous.'

It is only of late years that Tomé has risen into notice as likely to become the chief seaport town in the south of Chili. Its local advantages are beginning to be recognised, situated as it is at the entrance of the bay, possessing a good anchorage and all the requisites for carrying on the exportation of merchandise, far superior to Talcahuano, the now most generally used anchorage, from its being nearer to Concepcion, the base of operations and depôt for supplies. But when a railway—at present under contemplation—is completed to Tomé, it will speedily develop into a prosperous commercial seaport town—that is, in comparison with its present state, and according to the resources of the country. At present it is in its infancy and about as uninteresting a town as can be imagined, but the country round is very pretty and productive. This was

summer, and it was not uncommon during a ramble to come across large fields of strawberries.

Concepcion is distant from Tomé about twenty miles, and the only now existing public means of locomotion is a coach which runs between the two places twice a week; so desiring to see Concepcion, and hearing, though it was summer, snipe could be found in the vicinity, we made up a party to go for a couple of days. Accordingly on Saturday morning, after an early breakfast, we went on shore to where the coach started, the sight of which nearly caused us to repent our determination, knowing we had to travel so many miles in this most ancient and extraordinary-looking conveyance, innocent of springs, a box on wheels, many feet from the ground, with just room for the party inside and out. It is supposed to have been taken from the Incas, and no doubt something of the kind may be seen in the wilds of Ireland to this day. It was drawn by five horses all abreast of each other, and in attendance was a picturesque-looking individual called a 'guacho,' habited in a dirty 'poncho,' big spurs, and 'sombrero,' who rode by the side of the coach, and on coming to any steep place, or when fording a river, hooked his horse in front of the others, and making a fiendish noise, urged them over the obstacle. 'poncho' is a sort of blanket, many-coloured, and in the middle is a slit for the head to come through; it then lays over the shoulders, making a most comfortable paletot.

We started at 8 A.M., and after proceeding about a

mile along the sea shore, ascended by a winding road up a steep hill. But the beautiful scene which met the eye on arriving at the top amply repaid us, for we found it overlooked one of those charming little valleys seldom seen save in South America, and generally far Here on each side were the rugged and barren cliffs, and then down at your feet, miniatured by distance, the green plain partly devoted to cattle and partly to grain, whilst by the side of a small river almost hid by a grove of trees was the farm or ranche. Such a peaceful, quiet spot; lucky the man who owned such an oasis. The road was in some places very rough, and we were much jolted, but whenever we came to a good level piece of ground the horses were put to racing speed, and though five abreast may seem an awkward mode of driving, our coachman managed his team with great dexterity.

The country we passed through appeared to possess good qualities for cultivation, though from the aridness of the soil at that height, vegetation was of stunted growth. Many plants common to England thrive in this region. Especially to be noticed was the 'calceolaria,' growing in great profusion by the roadside, but for the cause I have mentioned not attaining that richness in its wild state, to which it can be brought by careful training. We passed through the village of Penko—the site of old Concepcion before it was destroyed by an earthquake—and arriving at the halfway house, descended to ease our jolted limbs whilst the horses were changed; after which, proceeding on our

way, we were not sorry when Concepcion came in sight, having been buffeted about for two hours and a half, beside which the dust and heat were as nothing.

The town from outside has a most insignificant appearance. This is caused by the lowness of the houses, nearly all of which have but one storey, from the prevalence of earthquakes; for they know not the day or the hour when one of those fearful visitations may take place, and bury the town in ruins. It is a common belief there that Concepcion is destroyed every forty years, and as it is now about that number of years since its last total destruction took place they are beginning to look forward to building a new town, which accounts for the present dwellings being nearly all single storied, and chiefly constructed of a species I have felt the shocks of two or three earthquakes, but I had never experienced one strong enough to enable me to realise the peculiar feeling of dread attached to them—that overwhelming fear which renders men childish and fills women with the frenzy of madness at the sight of universal destruction worked by unseen hands—until the morning following our arrival, when suddenly, whilst still in bed, the whole house began to shake violently as if heavily-laden waggons were passing rapidly through the street. But the absence of noise disposed of that idea, and the shaking continuing and increasing, I rightly concluded it was an earthquake, and was on the point of rushing into the street, the proper course to pursue, unmindful of the scantiness of my attire, when fortunately for the modest (?) susceptibilities of the natives, it subsided, and I went no further than the threshold. The inhabitants, however, are so accustomed to these shocks that they do not suspend their daily avocations until the houses begin to fall, when their terror is in proportion to their former indifference.

The earthquake I have alluded to, which took place in 1835, and proved so ruinous to Concepcion, is well described by Mr. Darwin, as follows:—

'At ten in the morning of the 20th of February, very large flights of sea-fowl were noticed passing over the city of Concepcion from the sea coast towards the interior. At forty minutes past eleven a shock of an earthquake was felt, slightly at first, but increasing rapidly. During the first half minute many persons remained in their houses, but then the convulsive movements were so strong that the alarm became general, and they all rushed into open places for safety. The horrid motion increased; people could hardly stand; buildings wavered and tottered; suddenly an awful overpowering shock caused universal destruction; and in less than six seconds the city was in ruins. The stunning noise of falling houses; the horrible cracking of the earth, which opened and shut rapidly and repeatedly in numerous places; the desperate, heartrending outcries of the people; the blinding, smothering clouds of dust; the utter helplessness and confusion; and the extreme horror and alarm can neither be described or fully imagined. About half an hour after the shock, the sea having retired

so much that vessels laying in seven fathoms water were aground, and every rock and shoal in the bay was visible, an enormous wave was seen forcing its way through the western passage, which separates Quiriquina Island from the mainland. This terrific swell swept the steep shores of everything moveable within thirty feet (vertically) from high water mark, and then rushed back again in a torrent which carried everything within its reach out to sea. A second wave, and then a third, apparently larger than the preceding ones, completed the ruin. Earth and water trembled, and exhaustion appeared to follow their mighty efforts.'

This account, from occurrences of a similar nature which have taken place since, we know to be no exaggeration, and there is nothing to warrant a belief that it may not take place again at any moment. I cannot but think that even Mark Tapley, if he had come here, would have taken some credit to himself for being jolly under such circumstances.

But to return from this little digression about earthquakes to a less interesting topic, our own selves. The town, as we drove through, bore no signs of an impending fate; all was clean and cheerful, and if the houses had not imposing exteriors, an occasional glance at the insides gave evidence of that taste in and love of sumptuous furniture, eminently a characteristic of the Chilians. Our driver pulled up at the principal hotel (Del Commercio), I should think the largest house in the town, kept by an Englishman; and whilst discussing a hearty lunch, we made inquiries about the shooting.

The answers were vague, but at last, by the assistance of our landlord, we found we should have to go six miles out of the town, so, in preference to walking, bargained for a little further acquaintance with the vehicle that had already brought us so far. The last state was worse than the first, for we had to pass through some gateways, always impassable to five horses abreast, and often so to the vehicle itself. But the two outsiders being disengaged, the gates were charged; victory to the wheels was the consequence, and we alighted in safety on some level marsh ground, though, as it was now summer, nearly dry, and we found partridge instead of snipe. The latter, here as everywhere else, migrate during the summer months, though a stray bird may be picked up occasionally. Not far from this spot we came upon a large wood, easy to be traversed from one end to the other, in which we found a great number of wild pigeon—large, dark-plumaged birds, and excellent eating—which gave us good sport, being assisted thereto by numbers of big hawks, who kept circling over the trees, then suddenly swooping down, would dislodge a covey of pigeons. The curious thing was that these hawks seemed to know exactly what we were about. They had no fear of us, but would come close to the gun when fired, collecting all round as if ready to pick up any wounded bird that fell. By this time it was dark, and though our sport had been mild, we returned to the hotel in a very contented frame of mind, which anyone can understand who has landed after a long voyage.

Early the next morning we drove out in two light traps to another place not so far; to reach which we had to pass through a level, park-like plain, studded with shrubs, but hardly a tree to be seen, that appeared peculiarly well adapted for a racecourse from its smoothness. We got cut by the side of a marsh, in the middle of which was a small lake, but almost unapproachable from high reeds and deep mud. But we managed to kill a few ducks as they flew across, which were brought out by the dog. After this we came across some snipe and wild swans, one of which latter we managed to obtain, with several of the former. Having now secured a very good bag, we returned to Passing through the Plaza we found a large assemblage listening to a good military band, and many looks of astonishment were turned on the strangers. No wonder! an Englishman's shooting costume is to these languid people, who hate to walk five yards, the embodiment of mystery. They cannot understand how we like it for walking's sake, or upon the mere chance of getting a few birds. But though greatly wanting in energy, the Chilians have many good qualities. I think there is no doubt of their being the foremost race on the South American continent, and they show visible signs of improvement year by year. For, unlike many other of these countries, acknowledging the benefits to be derived from foreign energies and development, they encourage their presence amongst them, and to Englishmen are ever hospitable.

It was with great reluctance next morning that we

exchanged our comfortable quarters at the hotel for our old friend the coach, and drove back to Tomé without further incident. That afternoon there was a dance on board, and all the residents about Tomé came off to the ship. We then had an opportunity of seeing performed the 'sama-cueca,' the dance of the country; music, a guitar, accompanied by singing of a monotonous character. It is somewhat after the style of the Spanish fandango, and is easily learnt. Indeed, one of our officers on this occasion showed such proficiency, that we were led to conclude that it was not the first time he had figured in the same performance. We left Tomé on December 21, and arrived at the island of Juan Fernandez early in the morning of the 24th. It is difficult to imagine a more impressive bit of scenery than that which greets the eye on coming on deck, and seeing it for the first time after anchoring. We lay close to the shore, which went up almost perpendicular to a height in some places of 3,000 feet, towering above us like a huge giant. These heights faced us in the shape of a semi-circle, and to all appearance we lay in the middle of an extinct crater, of which the other half of the circle had been thrown into the sea, and now formed our anchorage. Every appearance justified this idea. No doubt a vast eruption took place many years ago, which produced this wonderful formation. At night, particularly, it looks very grand, and from its closeness and height appears to be right over your head, standing out clear and distinct against the sky.

The island belongs to Chili, and there are now resident on it five families, possessing nineteen children, three cows, four sheep, several horses, and goats innumerable, which latter abound on the other side of the island. The principal personage in this little community spoke English remarkably well. He told us they were perfectly happy; never were ill; and had no desire to leave the island: a state of bliss comprised in those three statements difficult to be understood: but though only attributable to a lowered state of the intellectual faculties, a state which it would be good to meet with more frequently amongst cultivated nations. Juan Fernandez was discovered in 1567, but from that time I should imagine no advantage was taken of its discovery—except occasional visits from buccaneers till the year 1705, when Alexander Selkirk was placed on shore here for mutiny towards his captain. For more than four years he lived alone on this island, when at last he was discovered and taken off by a Captain Rogers, amongst whose crew was a man who had been on board Selkirk's ship when he was put on shore. Selkirk's narrative Defoe is said to have derived and written his wonderful book, 'Robinson Crusoe.' Whether he did so or not has been the subject of much contro-I will not attempt to lay down a dictum, for I do not think it matters now in the slightest either way. But in the memory of Defoe, who, as a writer, has had few equals before or since, and for the benefit of any interested in the question, I must say that having been led in the imagination to picture this island somewhat

according to the book, there is nothing in Juan Fernandez to give rise to the belief that Defoe could have received from Selkirk anything but the idea from which he constructed his famous romance; moreover, it was not published till the year 1719, ten years after the return of Selkirk. That Defoe took the greater part as he has been accused—of his story from Selkirk's journal, it is impossible for any one who has seen the island of Juan Fernandez to believe, and, seeing, form some idea of what the life of Selkirk must have been with the materials at his command, the vegetable and animal life upon the island. His cave can be seen now, cut in a sand cliff, with the shelves in it, used for cooking utensils, &c., so that unless we concede the almost impossible theory that when it was visited by a fearful earthquake in 1760 the whole island changed its nature and appearance, we must acquit Defoe of plagiarism. If he did read Selkirk's journal, it had the effect simply of making him strive in every way to show there was no connection or similitude the one with the other.

About 2,000 feet high is a small gap in the ridge to which it is said Selkirk clambered every day to look out for passing vessels. The day after our arrival being Christmas-day, we determined to celebrate it by a visit to this spot. The first thing you see on landing is a row of caves, cut in a small sand cliff. In the beginning of this century the island was used by the Chilians as a convict establishment for the worst of their criminals, and they did a great deal in making it ac-

cessible to man in many parts. These caves are the cells where they were placed for punishment, and one

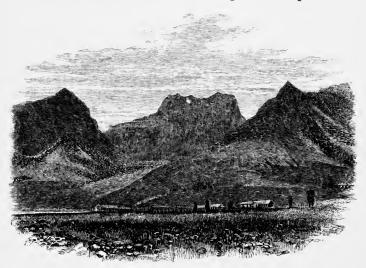


SELKIRK'S CAVE.

had evidently been used as a chapel. Now they were full of ferns, &c., which gave the interiors an artificial beauty otherwise of a painful sombreness. These convicts were withdrawn somewhere about the year 1854.

The highest part of the island is called the 'Anvil,' from its shape, and rises up nearly perpendicular about 3,000 feet. In order to find some way of getting to the top, any convict who should do so was offered a free pardon. Whether this was an attempted solution of the problem, 'What to do with our criminals,' or it was really desired for some reason to make it accessible, is not known. Probably it answered its purpose, for many

were killed in the attempt, and I do not think any human being has surmounted that particular part.



JUAN FERNANDEZ.

After passing through the small cluster of houses built of mud, the difficulty of our undertaking commenced. The path we followed had evidently been made by the convicts, and must have been a laborious task. Passing through fig, peach, and cherry trees, all growing luxuriantly, through myrtle, juniper, and lemon trees, the ascent now appeared nearly perpendicular, compelling us to rest every twenty or thirty yards, till we came to the more thickly wooded part, where the ferns grew abundantly, and in variety, many species growing here not to be found elsewhere.

A joyful shout proclaimed us at the summit, and

reading the tablet placed here by H.M.S. 'Topaze,' to the memory of Selkirk, in 1868. From our position the view was magnificent, for it embraced the whole island, and the sea for miles round. We stood on a narrow ridge not two yards broad, each side of which went down nearly perpendicular. It seemed as if there had been two craters side by side, and our ridge was the division between them, for it continued at an irregular height the length of the island. Sitting there, musing upon this freak of nature rising up in the middle of the ocean, and wondering what new phase it would assume at the next token of those hidden laws which produce such wondrous results, the mind naturally reverted back to that solitary figure gazing from this spot day after day, in hope each time that the eye might rest upon some welcome speck in the distance, till darkness coming on compels him to return to his gloomy cave, and try in sleep to forget that existence to him was but in name, and barely worth sustaining if it were not for that slight glimmering of hope which in man's most desperate situations is always granted by a merciful Creator. Starting up from this reverie, and giving an involuntary glance down as if to make sure that the good ship was still where we had left her snugly at anchor, by the approach of the sun to the horizon we saw it was time to return. Not forgetting that ancient custom and privilege of an Englishman to cut his name in the uttermost parts of the earth, we commenced the descent, and found it comparatively easy, going on board

with an excellent appetite for our Christmas dinner, when absent friends were not forgotten; and it was voted unanimously that there are many worse places to spend Christmas-day in than Juan Fernandez Island.

We arrived at Valparaiso on December 28, and saluted the flag of Chili, as customary. Here we found H.M. ships 'Charybdis' and 'Cameleon' in the bay; two Chilian men-of-war, the 'Esmeralda' and 'General O'Higgins,' with the French and our own storeship, besides a large number of merchant ships and steamers.

Valparaiso is situated at the foot and on the slope of a hill, or rather of many hills, whose crests are joined in one long ridge. The side of the hill to seaward of the town is now strongly fortified, but the guns are all 'en barbette.' They are of all sorts and sizes, consisting mostly of American rifled guns, with Chilian bronze and some French, all rifled, besides English 68-pounder smooth bores. The bay, on the other side of the town, is also protected by a few batteries, where chiefly Rodman and a few other American rifled guns are mounted. All these batteries have been completed since the bombardment of Valparaiso by the Spaniards in 1866.

The Bay of Valparaiso is open to the northward; but a good anchorage is obtained at this season of the year, as southerly winds prevail. We anchored close to the French storeship, in about thirty fathoms of water, for the bay is deep. One great disadvantage here is the strong breeze that blows nearly every afternoon, bringing off with it clouds of dust from the foot

of the hills, though it does not generally last during the summer more than five or six hours. In the winter the 'northers' cause great damage to ships and property, and all efforts to build a substantial landingplace to withstand the force of these gales have hitherto proved unavailing. Now in course of construction is a sea-wall, the stone for which is detached by blasting from the side of the hills.

The town proper consists of a couple of streets, between two or three miles long, running parallel at the foot of the hills. The street tramway, or as it is called, the 'Ferro Carril' system, is here in use, and answers well, except that as the streets are in some places very narrow, the lines are placed much too close to the small footpath, in order to give room for other vehicles in the road. There does not appear to be the attention paid to cleanliness here which might be expected from experience of other Chilian towns. This, to a great extent, may be attributed to and excused in the fact of its being a large commercial seaport town whose traffic is yearly increasing, but possessed of no adequate means of loading or unloading vessels, which is done by the means of large barges. But there is no excuse for the absolute squalidness and dirt of the upper part, where vice is allowed to revel with impunity, and danger lurks to the unwary stranger even in the day Here sewers are unknown, or not considered requisite, and as there is in addition an almost total absence of water, it is mainly owing to the strong southerly winds which prevail during the hot season

that epidemics are not common. Several large fires have occurred of recent years at Valparaiso, and the new buildings in the lower streets are handsome modern structures, much superior to the ones destroyed by English merchants, who have had a large share in producing the increased prosperity and wealth of Valparaiso, generally reside above the town on the crest of one of the lower ridges of hills, where also is the English church. Other ridges are occupied by Germans, &c., and by all who can afford to live out of the town; but many 'well-to-do' Chilian families have residences in the town below. Higher up lie scattered the dwellings of the poorer set of Chilians and dregs of society. These houses are built on the very edge of hills, and one over another, more like a pack of cards than dwelling-places, with dirty narrow passages leading up amongst them, so that one is inclined to regret that earthquakes are not violent here, or else these wretched houses would soon come down.

It is a well-known fact that English naval officers have not been received so well at Valparaiso of late years as formerly. This feeling of coldness, which at times has amounted to incivility, dates back to the bombardment of Valparaiso by the Spaniards in 1866, and is due to the supposition that the British Squadron, then present in combination with the American, would prevent it. Whether there were grounds or not for such a supposition, positive instructions from our Government left no alternative but to preserve a strict neutrality. Little damage was done by the bombard-

ment, the Spaniards contenting themselves with destroying a few warehouses, and then departed, but for a long time there was a very bitter feeling against the English fleet, difficult to be understood when coming from their own countrymen. Time, however, has worn this away, and we found ourselves very hospitably treated, deriving much personal comfort by being made honorary members of the club—a handsome building, and well fitted up-while amongst our friends were some of the best 'Santiago families,' now down at Valparaiso for the bathing season, who were only satisfied when we treated their houses as our homes, whose kindness it would be difficult to forget, and where young ladies, whose eyes sparkled with vivacity, tried all they could to instil a little of the Spanish language on our willing memories. It was not long before the usual afternoon dance took place on board, and, one or two thus pleasantly spent, showed it was a retaliation all approved of. But the entertainment of all was due to the theatrical talent displayed by our dramatic company, which had been in the process of organisation for some time. Everything being at last complete, they announced a performance on board, which was attended by a select party of friends from the shore, and proved a great success for a first attempt. The dignity of Lieut. F-, and his well-acted indignation as Major Rattan in quest of his wife, in the farce 'Ici on parle Français,' cannot easily be forgotten, or the acting of Mr. B-, whose natural suavity of manner, and knowledge of the French lan-

guage, enabled him to take the part of the 'Young Frenchman' with great credit, whilst the deportment of the young ladies, Messrs. F\_\_\_, A\_\_\_, and M\_\_\_\_, showed what a narrow escape they must have had of belonging to the other sex, and last, but not least, Mr. O-, as the little fussy Mr. Spriggins, was inimitable. In the second piece, 'Turn him out,' the ease and nonchalance with which Lieut. W- did the part of disturber of domestic happiness pleased his audience vastly, while Mr. C \_\_\_\_ fairly brought down the house when he appeared as Nicodemus Nobbs, and showed in that difficult character for an amateur an aptitude for impersonation not often met. The curtain fell amid great applause, and immediately the deck was cleared for a dance. In a few minutes an entirely new scene was being enacted, which was kept up with great spirit until a late hour.

There is at Valparaiso an excellent cricket club, sustained by the English residents, and they, being numerous, can bring a formidable eleven into the field. Among them are some university and many public schoolmen, who find in cricket a pleasing relaxation from business when the hunting season is over. They labour under some disadvantage, as the ground is on the top of an exceeding high hill, which makes practice an arduous undertaking, unless a horse is called into requisition. During our stay we played two matches with the V.C.C., but had to succumb in both.

Valparaiso has not much to boast of in the way of

amusements, though possessing two theatres, but the want of a public promenade is much felt.

- Just before leaving Concepcion we heard by telegram that war was likely between England and Russia. This probability was strengthened by the news which we heard on our arrival here, namely, that Russia demanded the revision of the treaty of 1856, the result of the Crimean war. To this demand it would appear as if England, through the mouth of her Foreign Minister, sent a polite refusal, and hence the difficulty. Since then, however, a new face has been put on the situation by the proposal of Prussia that a conference should be held in London to settle the dispute, which has been agreed to, and all immediate apprehensions are dissipated. In France the long forbearance of the Prussians before Paris has given way under the lengthened resistance of the inhabitants, coupled with the feeling in Germany that the process of starvation, being slow, should be assisted. Paris, accordingly, is being bombarded, and the reply from the forts is stultified by the admirable disposition of the besiegers' works.

Santiago, the capital of Chili, is distant only five hours by rail, and the line is, in many parts, through extremely pretty country. Some of the plains are extensive and well cultivated, the chief being Limache, Quillota, and Santiago, in all of which a perfect system of irrigation is carried on, and flowers and fruit, as well as grain, are most abundant. Of the capital a very short stay prevents my giving anything like a perfect

description; but even the casual visitor cannot help being struck with the beauty of the houses—many of which are built entirely of marble—and with their cool-looking courtyards, full of flowers, and, in several instances, with fountains playing, look most inviting, especially in the summer, when the heat is great. The interiors are no less striking, the first houses in London and Paris being required to supply the most costly articles of furniture and objects of vertu, not to be obtained in this country.

Churches are numerous, but lack that beauty of architecture and internal ornament which one would be led to expect in a country where priestly power exercises such influence upon the imaginations of the inhabitants, and where religion is attended by all the bigoted observances more appertaining unto the Middle Ages. This influence was considerably diminished by the catastrophe which occurred at Santiago in December, 1863, when the 'Church of the Campañia 'brilliantly illuminated for evening celebration, and having within its walls about two thousand people, chiefly women, caught fire. The means of egress were so small, and the conflagration was so rapid, that very few escaped, while great indignation was felt at the conduct of the priests, who, on this occasion, were the first to consult their own safety, when a little presence of mind might have stopped the panic, and prevented such a fearful sacrifice of life. The victims were all buried (or what was left of them) in the cemetery, which is full of many beautiful monuments,

but their grave was most simple, consisting of a plot of ground, about twenty-five yards square, planted



BURNING OF THE CHURCH OF LA CAMPAÑIA.

with flowers and shrubs, enclosed by an iron railing, while on two small white marble slabs is the following inscription:—



INCENDIO DE LA IGLESIA DE LA CAMPAÑIA, 8 DE DICIEMBRE DE 1863. FESTOS DE SUS VICTIMAS, 2,000 mas ó menos.



BURNING OF THE CHURCH
OF THE CAMPAÑIA,
8TH OF DECEMBER, 1863.
HERE REST OF ITS VICTIMS,
2,000 MORE OR LESS.

There seems to lurk under the two last lines a pithy irony, but a felicity of expression more affecting in its vivid reality than the costliest tomb.

We visited the site of this church, but nothing now remains; in fact, it was razed to the ground by the Government a fortnight after, and we were told it would never be rebuilt, as this was the third time of its being burnt.

The theatre of Santiago had also been burnt just previous to our arrival; and as of other public amusements there were none, we were not sorry to say farewell, and return to the ship, hoping that a future visit of greater length will enable me to examine somewhat into the working of the government and constitution of Chili, with other social questions of interest.

By the time we had to leave Valparaiso many of us felt quite sorry to part with the pleasant acquaintances we had made, consoling ourselves, however, with the hope of meeting again in the course of a year or so, and when we left the bay on February 6, for Coquimbo, the waving of handkerchiefs from many windows showed that our friends on shore wished us 'good speed.'

## CHAPTER VII.

ARRIVE AT COQUIMBO — SMELTING WORKS OF GUAYACAN — LAND SMALL ARM MEN FOR DRILL — A VISIT TO LA SERENA — LEAVE COQUIMBO AND ARRIVE AT ARICA — EFFECTS OF THE EARTHQUAKE AND TIDAL WAVE — THE 'WATEREE' AND 'AMERICA' LEFT HIGH AND DRY — DESCRIPTION OF THE SCENE BY AN EYE-WITNESS—LEAVE ARICA AND ARRIVE AT ISLAY—A TRIP TO AREQUIPA—A FOUR-WINGED BIRD.

'VOYAGES detain the mind by a perpetual occurrence and expectation of something new,' says an old writer, and therein he was to a great extent right, though he should have gone on to say that these expectations often are not realised, and that travelling dispels many illusions which we have fondly cherished. Who that has been to Persia brings away any of the ideas with which his romantic brain once teemed. Can we find aught in the Arabs noble and picturesque: we now know them for thieving, dirty rascals, and their country a sandhill. Does the noble red man under the light of personal inspection retain any of those attributes with which, through the medium of Cooper and Mayne Reid, we have always invested him: now it is imbecility instead of silent dignity; cunning instead of sagacity; treachery instead of courage. But in truth all things must suffer by comparison with the imagination, and in solitary cases only is the adage borne out that 'truth is stranger than fiction.' This has been brought home to us with great force since we came south, for it would

require to be of a very imaginative turn of mind were one to assert as a firm conviction that there is anything particularly inviting in the general aspect of the ports on the coast of Chili and Peru, or that the inhabitants were gifted with any qualities calling for much admiration. This feeling predominated during our visit to Coquimbo, where we arrived on February 9, having had a calm all the way from Valparaiso.

The town is situated on the south-west side of Coquimbo Bay, and is well protected from the prevailing winds. The peculiar appearance of the surrounding soil tells you that mines should not be far off. Nor are they; for thirty miles inland are the coppermines of Pauncillo, which afford ample employment, both at the mines themselves, and at Coquimbo and Guayacan, to several hundreds of men. About one mile to the south-west of Coquimbo is the harbour of Port Herradura, on the north side of which is situated the small village of Guayacan. All the copper from the mines of Pauncillo, conveyed by train, is smelted either at the latter place, where there are very extensive works, or at Coquimbo; but the largest are at Guayacan.

The latter place is inhabited almost entirely by the people employed in the smelting works, nearly all of whom are English; and a very happy community they seem to be. The manager, Mr. Francis, has taken great trouble in improving the dwellings of the workmen, and in providing comfort for their wives and families. Through his exertions a school-house and chapel have been built: there is also a library on a small scale

established in the village. The works at Coquimbo are, as I mentioned before, not so large as those at Guayacan; nevertheless they offer employment to a great number of poor people who would perhaps otherwise have no means of earning a livelihood. All the copper when ready is sent over to Guayacan, as the mail steamers call there to ship it, Port Herradura offering much greater advantages as regards depth of water, wharfage, &c.

Coquimbo possesses no public buildings of any importance, and, although only a small trading port, is a clean, well-built place. The houses are lowthe same as at all other Chilian and Peruvian portson account of the constant fear of earthquakes, which are so prevalent on the coast. Our main object in going to Coquimbo was to give our men an opportunity of landing and going through some of those important military manœuvres which form part of a sailor's duties, and make him, when proficient, almost as good a soldier as he is a sailor. Coquimbo has outside the precincts of the town a good exercising ground, which the authorities have always granted permission for our ships to use; so at six o'clock on the morning after our arrival the whole army disembarked, and then, preceded by the band, marched through the town up to the ground, where they were soon initiated into all the mysteries of wheeling, marching, and countermarching. It is discipline which enables sailors so quickly to assume the military exterior, and without apparent difficulty be invested with those necessary

characteristics usually considered foreign to their nature. It is the possession of this quality when combined with a high standard of intelligence which have proved their value in India, China, and the Crimea. This was a curious scene, something new to the natives, who flocked here in great numbers, bringing fruit and liquor, for the sun was intensely hot. Beer was permitted, but spirits prohibited, so the discovery of a native with the latter article led to its being made to refresh mother earth instead of 'Jack.' Such a despotic act in a Republic caused indignation, and the executor was arrested, but strenuous efforts on the part of our Consul procured his release.

Nine miles from Coquimbo is the town of La Serena, with a railway between them, so as we were going to sea the following day another officer and myself paid it a short visit. On the way, the country we passed through appeared fertile and well cultivated, though suffering from a scarcity of water. This day was the anniversary of a battle between the Chilians and Spaniards, where the former gained a victory, and now make a great deal of it. At four in the morning bands were playing and bells ringing, accompanied by a salute of twenty-one guns. Here at Serena we found a copious display of Chilian flags: every house seemed to possess one. This is often spoken of as the model town of Chili. It certainly appeared very clean, and the houses, what one could see of them from the outside, though low, well constructed. Being a holiday everybody had gone into the country, and the streets

were deserted, so, finding an hotel kept by a Frenchman, who had table d'hôte at five, we entered, and partook of an indifferent dinner, but to which a bottle of Burgundy and a good cigar reconciled us, after which, strolling down to the Alameda, a fine promenade about a mile long, we found a goodly assemblage collected, a band playing, and a regiment of volunteers firing They were small men, and appeared feu de joies. decrepid. Their shoes were apparently too small for them, so anxious are they to keep their feet within the smallest possible bounds. We were eyed with some curiosity, being evidently known as strangers and 'gringros.' In Chili, but especially at Valparaiso, Englishmen are known by the name of 'gringos.' Amongst the lower orders this is so common that if you talk about Englishmen they don't understand, but mention 'gringo,' they know at once what you mean. The literal meaning of the word is 'unintelligible gibberish,' but whether there is a deeper signification attached, and they use it in contempt, or otherwise, I was never able to find out.

There being no train back that night we were forced to return on foot, which we did along the line, and got back to Coquimbo about ten o'clock. We sailed the following morning for Arica, where we arrived on the 19th.

There could not be found a better exemplification of the great drawback to the advancement of Chili and Peru resulting from the frequency of earthquakes, than in Arica, the scene only three years back of one of those convulsions, accompanied by a tidal wave of unprecedented dimensions, causing the destruction of the whole town. The recentness of this event, and the peculiar circumstances by which it was attended, surround the spot with an interest not to be equalled anywhere on this side of the continent; so I was glad to have an opportunity of satisfying a curiosity which accounts at the time called up.

The site of a seaport town is naturally chosen according to the capacities afforded to the sheltering and anchorage of vessels, or Arica would never have been selected for human habitation, lying as it does on very low ground, encompassed by hills which shut out the purifying breeze, and are destitute of vegetation in the slightest degree, but apparently all sand. That, however, is not a peculiarity here, being common to the whole coast of Bolivia and Peru, and it is easy to see that in mining, not agriculture, must these countries chiefly exert their energies, for I am convinced that but a small portion of the riches of Peru have yet been brought to light.

Owing to the unfavourable reasons before mentioned, Arica has at all times been subject to epidemics of disease—chiefly fever and ague—which are assisted by other local causes, such as entire disregard to cleanliness, and overcrowding of the miserable dwelling-places of the lower classes; seeing which, if one did not know that exactly the same thing is the case in the East-end of our own enlightened capital, where can be found, in spite of philanthropic benefactors and heavy

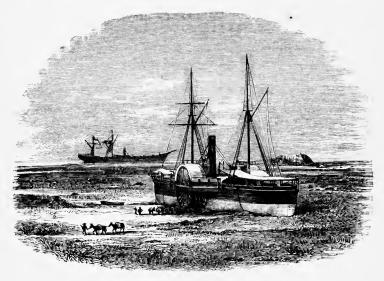
taxation, as much squalidness and vice as anywhere in the world, we might not be inclined to descend from our lofty pedestal of neighbourly condemnation, to find many excuses for these semi-savages which could not apply to our own, and so withhold perhaps an unjust judgment.

In leaving Chili you leave behind all signs of vegetation and cultivation, and the shores of Bolivia and Peru assume a barren appearance, with that peculiar coloured soil denoting a dearth of water and volcanic tufa, which extends to the Equator. Just before arriving at Arica the cliffs overhanging the water were covered with white like a hoar frost, giving them a picturesque appearance, which does not require much examination to tell you is guano, the principal source of revenue to Peru; and though some say the stock of it is beginning to fail, I have no doubt it will last till some other article as easily procured is discovered possessing as valuable qualities. The 'Salsola weed,' abounding on the coasts of Vancouver Island and Sitka, from which kelp is procured, is found to have, after undergoing a slight process, a wonderful effect upon a poor soil, as also the bones of all marine animals. We anchored in the Bay of Arica, where on the rocks in fact all over the Bay—seal and every description of fish appeared to abound. The former, if time permitted, might have been shot with ease, but an eagerness to get on shore prevented their being disturbed.

Truly on landing it seemed as if the tragedy of Pompeii had been enacted over again, and greater chaos produced. Could this be the town which all speak of three years ago as highly prosperous and increasing, with many fine buildings, at one time thought of as the capital of Bolivia. How different the scene now; not a vestige remains save a few stones where these houses had been, and, scattered here and there, iron pillars and other ornaments of architecture strong enough even to resist such a combination. The few houses there worthy to be designated by that name appear to belong to the different Consuls, while the natives, deprived of house and home, lucky to have escaped with life, are obliged to content themselves with huts, composed of bamboo and matting, much the same as is used by the Indians of the north.

But the great object of interest to us was to go some two miles outside the town, where are two ships which were thrown up inland several hundred yards. There is, or was, railway communication between Arica and Tacna, about 36 miles off, so we proceeded along the line, which runs parallel to the beach. The heat was great, but as we had heard an adventurous spirit had established a bar in one of these vessels, we struggled on manfully, with the prospect of quenching our thirst ere long. We found one ship lying perfectly upright in a field nearly half a mile from the water's edge, with but little external injury, except that the after part of the framework of the paddle-wheel was bent, just as if here the first force of the wave had come, before imparting the forward movement. She was the 'Wateree,' an American man-of-war, about

240 feet long, with powerful engines. The crew were, I believe, all saved; in fact she was simply carried up, deposited ashore some 700 yards, and there left by the receding wave. At that distance from the water, with so much soft sand to traverse, and owing to the shallowness for some distance out, to get her off with no appliances at hand was almost an impossibility.



U. S. S. SHIPS 'WATEREE' AND 'AMERICA' AT ARICA.

She was therefore sold as she was for 2,000*l*., the buyer, I heard, disposing of the guns for more than double that sum; and after taking all that was really valuable out, considered the transaction so profitable as to warrant his leaving the remainder to gratify the curiosity or cupidity of travellers.

We scrambled up the paddle-wheel and on deck.

All was deserted; no bar, as we had fondly anticipated, so our thirst remained unslaked. A greater part of the engines still remained, and what seemed more odd, a large quantity of spherical shot and shell, apparently nine-inch Rodman, in perfect condition, otherwise there was nothing valuable left. The other vessel, the 'America,' also a man-of-war, and sister vessel to a Peruvian corvette now at Arica, lays about 100 yards from the edge of the water, and, therefore, though thrown up at the same time is not such an object of interest as the other. Another American man-of-war, the 'Fridonier,' was laying there with anchors down, when she was overtaken by the wave. What induced them to lay in that position when indications of the occurrence had been given no one can tell, but this huge wave, rapidly advancing, came upon them. The anchors held, so the ship, kept down by an invincible force, instead of rising and being carried onward by the wave, was passed over by it, swamped, and all on board perished.

The earthquake took place at 5 P.M., and gave a slight notice of its approach, so that people were able to clear out of their houses, which were speedily shaken to the ground, while the earth cracked in many places. At the same time the sea began to recede, giving the first warning of the wave. In the meantime the people, partially recovering from their fright, came back to their houses in order to try and save some of their most valuable property, for in addition to other horrors, lawless bands had begun to pillage, taking advantage of the confusion that reigned. Whilst thus

variously employed, without heed the wave came upon them an hour after the earthquake, and submerged the town. An eyewitness described the scene to us as something fearful. The people were beside themselves with fright, standing shaking in every limb, not knowing when they might be destroyed, though a great number fled out of the town to the neighbouring heights, and so were saved. During the hour that intervened between the two calamities, the sea had receded some distance, then, gathering itself up into a huge wave several feet high, came on with overwhelming force, not broken, but as a compact mass impelled by an invisible power. First seizing on the ships I have mentioned, carrying them on nolens volens, it then swept over the town, bringing death and destruction to all in its path. The describer of this wonderful sight stated how, with his wife and children, he managed to get into a large boat. Thrice did the waters recede, taking them in the reflux, and thrice return to sweep over the town, he escaping by a miracle. Then the raging was succeeded by a calm, though such was the chaos produced as rendered it impossible for the survivors to find where their houses had been.

Though the effects of it were so plainly visible all round, it was more palpably manifested and vividly brought before the imagination by visiting the old cemetery. Many of the graves had been washed away, and there were several coffins exposed, some of which were broken up, exposing the hideous contents. One

more ghastly visible than the rest attracted our attention, having the arm and hand projecting up in the air, with the flesh dried on the bones. Several skulls also were lying about, and human bones even about the town. All this, a proof that after a lapse of three years the place has hardly recovered equanimity enough to rebury its dead, though a new cemetery is now building.

Such was this terrible visitation, killing about 300 people, and destroying an immense quantity of property of all descriptions. Whether Arica will regain the ground it has lost as a seaport town remains to be seen. Perhaps time, that healer of all things, may remove the shock occasioned by this event, and fear of repetition which caused such an exodus. We have seen cities destroyed and new towns built up on the same site -ay! even using the same stones-in different parts of South America; earthquakes looked upon as an evil to be borne, not fled from-for it is impossible to say where the next may take place-and warnings treated with indifference till the evil day arrives. Perhaps a town disappears, perhaps only a few houses; neither one nor the other will avail to prevent after an interval the counterpart appearing ready to undergo a similar fate. Such a disease must therefore retard to an enormous extent the advancement of the country. Like parallel diseases of the body there is as yet no remedy; the cause even is most uncertain. Electricity is generally, and I believe most truly, ascribed as the effecting cause, but what, as in the

case at Arica, are the laws regulating this extraordinary alliance of earth and water it is impossible to say.

It is a curious fact that the following year came another earthquake upon Arica, more severe than the preceding, but not doing much damage, there being nothing left for it to destroy; the water, however, was not in the least moved. During the afternoon our photographic artist had, under energetic supervision, been taking views of the ruins and castaway vessels, executed with his usual skill—valuable mementoes of such an interesting spot, and better descriptive of the scene than the pen of the most ready writer. All being on board at 8 P.M., the anchor was got up and we steamed away slowly to the northward, bound for Islay, 130 miles up the coast, hoping at that place to find as much to interest, if not to amuse, as we had amongst the ruins of Arica.

We arrived at Islay on February 21, and the mail came in a few hours afterwards, bringing most important news from Europe. Paris, which had latterly shown signs of the approaching end, from the few vain struggles made to break the iron cordon which encircled it, deprived of all hope from the provinces, and threatened by starvation, has capitulated, and a three weeks' armistice is proclaimed, to arrange the terms of peace. Further struggle is now evidently even to them hopeless, and they must swallow the bitter pill with a good grace. Thus comes to an end one of the most extraordinary wars the world has ever seen. Six months have sufficed to effect a most complete change

in nearly every part of Europe. A great nation, hitherto believed to possess unlimited military power, has had to succumb to its old rival, and now lies at the mercy of the conquerors. That army believed to be invincible is annihilated, the whole country overrun by the invader, the dynasty overthrown, and the Emperor a prisoner. Before facts of such importance, an accomplishment like the loss of temporal power to the Pope created but little excitement in the civilised world, while the union of Prussia with the South German States, and the revival of the old Empire of Germany, with the King of Prussia for its head, increases that belief, so common in Germany, that in course of time the Teutonic race will predominate throughout Europe, and the Latin race disappear. The characteristics latterly displayed by the French go far to confirm this idea, for even their best friends cannot say that under misfortune they have shown any great qualities. A lukewarm patriotism and absence of self-abnegation are serious defects to find in a nation when overtaken by calamitous reverses. Divided into numerous factions, they could not cast aside their internal differences in the face of that momentous struggle, when all should have stood as one man. When the history of this war comes to be reviewed, and the French nation placed on their trial, the verdict of the world must be given against them; and the heavy damages they will now have to pay will be a trifling matter compared to the loss of moral prestige incurred.

The arrival of the mail at a place like Islay, with its welcome accompaniment of letters and papers, was a most pleasant assistant in rendering agreeable our stay in a port which even the most enthusiastic traveller would own to be a trifle uninteresting; but it can be made less oppressive by a trip to Arequipa, an opportunity of which I was not slow to avail myself; and of its result I now subscribe an account.

Islay, on the coast of Peru, in latitude 17° south, is the proper sea-port of Arequipa. The town, a collection of poor unattractive buildings, containing about eight hundred inhabitants, is situated on the slope of a bluff, which runs out a considerable distance, terminating in a cluster of rocks, which, together with a chain of rocky islets, form the bay, and affords sufficient shelter from any wind that blows on this coast, though not against the swell which generally rolls in. There is ample anchoring ground for shipping, and a depth of water varying from sixteen to thirty fathoms. An excellent port might be made by filling up the spaces between the islands, but until the Arequipa railway is brought on from Mollendo to Islay, nothing will be done to improve it. Mollendo, a wretched little cove (about six miles south), has, in the meantime, been declared the shipping port; but it will be found utterly inadequate when trade becomes more extensively developed, on account of its confined space, dangerous entrance, and exposed anchorage outside. Nothing can be more dreary than the aspect of the country about Islay; a chain of bare hills running parallel with the coast, slope up from the shore to an elevation of 3,500 feet, and may be considered the coast range of the Andes. A white ash covered the surface of the ground, without a blade of grass or shrub to relieve the eye.

Directly after anchoring, our Consul, one of the jovial sort, came on board to pay his respects to the Admiral, and then a party of us accompanied him on shore. The town does not improve on closer inspection. It, however, has a square and fountain—the latter decidedly in keeping with the primitive style of architecture prevailing. Besides the Custom House—a tolerable-looking building, but about to be closed—the only other decent-looking dwelling was the house of Mr. Gibson, who was absent in Arequipa; but we were received most hospitably by Mr. Todd, a Scotchman, at one time connected with the former's firm.

The following morning, a party of six officers, including the Admiral and the Consul, started at an early hour in the steam launch for Mollendo. Several vessels were at anchor off the cove, taking in or discharging cargo. At first sight, the entrance, covered with foam dashed back from the rocks, looked very uninviting, but there is a deep though narrow channel close to the south rocks. Inside it was tolerably smooth. Mollendo has already been described as a wretched little cove, frequently impracticable when a heavy swell sets in: it, however, answers the purpose of landing the railway plant. A few houses

belonging to railway officials and an hotel are built on a plateau overlooking the cove.

Mr. Meiggs, who obtained the concession for this railway, is one of the most enterprising men of his day. An American by birth, he seems to have tried his fortune in California and the Brazils, and failing, turned his attention to railways in Chili and Peru. Fortune here smiled on him, and he now holds concessions from Peru for the construction of five or six other railways, amounting to eighty-three millions of dollars!!

The line from Mollendo to Arequipa is 107 miles in length, and was finished a month ago, when Mr. Meiggs gave an entertainment to the President, ministers, &c., which cost 125,000 dollars, nearly thirty thousand pounds—quite a fortune in itself—but he toys with millions. This railway is being carried on from Arequipa to Puno, and it will hereafter be extended to Cusco, the ancient capital of the Incas. The most remarkable railway in course of formation is that from Lima to Aroya, a distance of 135 miles, which will cross the highest range of the Cordilleras at an elevation of 15,000 feet, and is intended ultimately to bring Western Peru into communication with the tributaries of the Amazon, on the bosom of whose mighty waters the rich treasures of Peru will be borne to the Atlantic. The advantages of these railways cannot be over-estimated; and Peru is indebted to guano for the means to carry out these great and wholesome schemes.

Having a letter from Mr. Meiggs to the manager of the railway we received every attention, and had not a body of soldiers been going to Arequipa should have had a carriage to ourselves; we, however, made ourselves exceedingly comfortable in a nicely fitted-up car of the American description, which is better suited to the climate than the English carriages.

Starting at a quarter before eight, the first fifteen miles of the route ran parallel to the coast, along a sandy flat, except where it crossed a small plain artificially irrigated by water brought from the Tambo. Turning inland we began to ascend a gentle incline, which, however, shortly after passing the station of Tambo, about five miles from the coast, became much steeper, and assumed frequently the proportions of 1 in 25. The line runs zig-zag along the face of the hill, following its sinuosities, frequently scarped out of the solid rock, and crossing the head of the gorges on great embankments. The cuttings are very heavy in some places, but there are no tunnels.

Having crossed the sea range at an elevation of 3,500 feet, we entered on the arid pampa, or plain, of Islay, here about forty miles wide. In character it exactly resembles the Egyptian desert, even to the mirage: not a drop of water over the whole extent of this desolate region. A survey is now being held with a view to irrigating the plain by means of water brought from one of the mountain streams. The soil a little below the surface teems with the germs of

vegetable life, only waiting for moisture to render the wilderness a verdant plain.

In the midst of this desert is a tambo or hut kept by a queer little Devonshire man known as 'Jimmy,' who established himself here fourteen years ago, hoisted the British flag, and eked out a livelihood by selling refreshments to travellers and persons going to and fro on the coast. Here his Arequipan wife has borne him ten children. Things now begin to look up with Jimmy. The railway has brought grist to the mill, and he is likely to die a wealthy man. Already he has commenced to enlarge his establishment, and, I believe, has invested money in houses in Arequipa. Our countrymen, forsooth, find strange resting-places!

After crossing the pampas we again ascended a rocky ridge, crossing at an elevation of 8,200 feet. From the crest we looked over a sea of tumbled mountains and a desert plain, with innumerable small cones thrown up during one of earth's convulsions. A little beyond the ridge we found ourselves on the edge of a deep abyss, at the bottom of which, 1,000 feet below, rushed impetuously a turbid current, forcing its way through the narrow gorge. Frequently the cars literally overhung the yawning gulf, and the slightest accident would have thrown the train with its living freight into the abyss It requires careful driving, which was accorded by the steady Scotch engineer. During the rainy season, when landslips are frequent, the risk of catastrophe must be greatly increased. As we advance the gorge expands, and a narrow but smiling valley hugs the stream in its soft embrace, gradually widening until it culminates in the rich and fertile plain of Quilea, on which stands Arequipa.

The distant mountains were enveloped in cloud, and rain began to descend before we entered the plain. At 4.30 we arrived at an open space in the suburbs of the city, where the terminus is to be built. Walking to the house of Messrs. Fletcher and Co., we were hospitably received by Mr. A--- in the absence of Mr. R---, the head of the house in Arequipa, but whose pretty Peruvian wife gracefully did the honours. Mr. G---, of Islay, with his daughter, were also guests. houses of Fletcher and Gibbs are, I believe, the only English two in Arequipa. Their exports are principally the fine wool of the Vicuña and Alpaca: their imports being various English manufactures, especially a peculiar cloth of softest wool and bright colour, which has an immense sale, and resembles, I am told, a native cloth made in the time of the Incas. Mr. F-, the head of the house, lives in England, and is reputed a millionaire. We sat down a large party to dinner, as it is the custom in the English houses for all the clerks of the establishment to live in the house.

The following morning I was up betimes, and, sallying forth, had a splendid view of the magnificent volcanic cone of Misti, which rises 12,000 feet above the level of the plain at a distance of about fifteen miles. Its snowy summit, sharp and clear against the blue sky, glistened in the sun. On either side, but with wide valleys between, rose other snowy peaks.

and far away in the north-west more distant ranges of the Cordilleras were visible through the transparent atmosphere. The air here is so rarified that distant objects seem close at hand; respiration is also affected in some people to such an extent as to cause bleeding at the ears and nose, and great oppression in the head. I confess to having experienced none of these unpleasant sensations, although some of the party did so in a slight degree. Visiting the market, I found it well supplied with vegetables, but meat, poultry, eggs, and butter were dear, and not abundant: a variety of household goods and wearing apparel were also exposed for sale. But the most curious article is the frozen potato, looking exactly like a round pumice-stone: it is, however, good when cooked.

Arequipa, which derives its name from an Indian word meaning 'place of rest,' was a town of the Incas, where they rested on their way from Cusco, or Puno, to the coast. It is situated in the corner of a fertile plain of considerable extent, watered by the river Chile, which divides the city into two unequal parts, but connected by a handsome old stone bridge. It contains about 40,000 inhabitants, and has a striking and oriental appearance, from the whiteness of the houses, built of stone, and principally flat-roofed, with vaulted ceilings, wood being very scarce. It boasts a fine cathedral, several old churches tawdrily decorated, various monasteries and convents, a college, and a hospital. The earthquake of 1868 left hardly a building entire, and the city is still ruinous, although the

restoration of both public and private buildings has commenced. The body of the cathedral was left standing, but the towers were thrown down; and a handsome square was wrecked. The streets are tolerably wide, with pavement; an open drain runs down the centre of each, generally in a filthy condition. The shops make but little display: they are stocked principally with foreign goods, there being few native manufactures. The better houses are built in the Spanish style: you enter by a gateway into a quadrangle, the sides of which constitute the house, onestoried on account of earthquakes. The city is extremely healthy, epidemics being almost unknown. People from Islay have died of yellow fever caught there, but the conditions of the atmosphere are happily unfavourable for its propagation.

The inhabitants are a mixed race, and the lower classes not prepossessing in appearance. The dress of the women consists of a gaudy-coloured petticoat of a soft woollen cloth, before alluded to, a shawl, and hat. The men wear the poncho, with knee breeches, bare legs, and sandals.

Arequipa has always been the focus of revolution, and its neighbourhood the scene of more than one battle. A year or two ago General Prado, in revolution for the presidency, bombarded it for three months, from the west side of the river, where he established his batteries. But it was resolutely defended, and in the assault Prado's men, getting their ammunition wet, were driven back, when he withdrew, and had ulti-

mately to fly the country. Revolution in Peru means a struggle for the presidency. The temptation to fight for the prize is very strong, as the president has de facto the control of the money bags, and manages not only to enrich himself but provide also for those supporters who placed him in power. Since guano became a source of wealth, money has been lavished broadcast by the government, and there are probably more wealthy men in Peru, considering its population, than in any other country of the world. I am bound, however, to say that the present president has inaugurated many valuable works, but little can be shown for the 450,000,000*l*. sterling derived from guano.

The prefect or civil governor, being a person of importance, the Admiral called on him. He is, I believe, upright and able. Our quarters still bore traces of the Carnival, coloured egg-shells lay thickly about, and the walls were bespattered with flour, &c. The great amusement of young ladies and gentlemen during this festive season is to drench each other with water, and to pelt one another with eggshells containing scent or coloured fluids: the encounters are fierce, and the destruction of dress serious. During our stay at Arequipa we made one or two excursions on horseback, but beyond fields rich in Indian corn and pasture the country presents nothing remarkable. The grape will not ripen, owing to the keenness of the air at night, but from the maize the natives make and consume largely a species of beer: it is, however, to our taste unpalatable. Of native dishes the best I have

tasted, which appears at breakfast and dinner, is a sort of soup made of vegetables and fowl, called 'achi,' very similar to the 'casuela' of Chile.

The Llama is used in this country as a beast of burden: it resembles a miniature camel, with a long neck, soft eye, and spongy hoof, but without the hump on its back. It has a coating of fine soft wool and hair; its load is limited to 100 pounds down-hill, and fifty up. Against the imposition of a heavier weight it rebels, and will not move. There are four species of this 'sheep of the Cordilleras,' viz. the Vicuña, Alpaca, Llama, and Huanaco, or Guanaco. The wool of the first named is the finest in the world, and brings a very high price in the English market. The Vicuña, unlike the Llama or Guanaco, cannot be domesticated; it roams over the rugged sides of the mountains, seeking for a rough grass called 'yéhu.'

A few ladies assembled in the house the second evening of our visit; when carnival on a small scale was enacted, and the dancing (although Lent) went merrily on. The 'sama-cueca' was performed admirably; some of the officers rendering themselves willing and apt pupils. Mr. T—— made rapid progress, going in for it con amore under the auspices of one or two very pretty girls, so as apparently to cause a pang to more than one looker-on unaccustomed to see their usual partners thus engrossed and appropriated.

The Consul proved a 'most remarkable man,' 'a

regular peep-o'-day boy,' ready for everything, from a cocktail at 5 a.m. to B. and S. at two the following morning, always good-natured and in the best of spirits, with a fund of anecdote. On the morning of the 25th, bidding farewell to our kind entertainers, we started to return to the ship, accompanied by Mr. and Miss S——, and two other young ladies.

I cannot, however, take leave of Arequipa without expressing our deep sense of the cordial reception we met with from the English community. From one and all it was courteous, hospitable, and kind, so that we shall long remember our agreeable trip.

En route to Mollendo, stopping at the Tambo de Joya, Jimmy, in honour of the event, insisted on treating the party to champagne, which all found grateful after the dusty journey. I was amply repaid for rather an uncomfortable seat on the engine descending the incline, by the grandeur of the scenery and also in witnessing the careful driving. Steam was shut off immediately the incline became at all steep, and the speed entirely regulated by the brakes. At 4.30 we arrived at Mollendo, where we found the steam-launch; and two hours afterwards, having landed our friends at Islay, were on board the ship.

We found during our absence opportunity had been taken to exercise the big guns against one of the small rocky islands a short distance off the ship: and on visiting the spot after a heavy day's pounding it was extraordinary to see the small amount of damage done to the solid rock. The débris of solid shot and shell

were picked up in various shapes, but alteration in the aspect of the rock was scarcely discernible.

It was on this island that a curious fact in ornithology was brought to light and verified, namely, the existence of a species of bird having four wings; long a disputed point whether such a phenomenon had not its origin in an optical illusion such as, in certain conditions of the human race, multiplies an object. But the circumstances under which this specimen was observed leaves no doubt that one of these rare birds was seen, being remarked and reported by two people whose veracity is unimpeachable, but who, unfortunately, had no fire-arms to obtain this rara avis in terram. They describe it as of the size of an English thrush, with similar plumage, having two separate wings on each side, but working spontaneously. It was seen to settle and get up once or twice when so near that a stone was thrown, and eventually it flew away. Thus is settled the fact of their existence: though whether this was a solitary instance, a freak of nature, or a wanderer from his tribe, must remain a sealed book till further research has been made into the subject. At any rate, there is no doubt that, midst the snowy peaks of the Andes, remains a fund of unexplored nature which may yet bring to light many more extraordinary truths than a four-winged bird.

The following day a small party came on board to witness and assist in a ceremony no longer novel to us—a christening, when the infant of Mrs. S— was baptised by our pastor with his usual impressiveness.

Let us hope at some future day the worthy gentleman may be a more interested actor in this ordinance, and find useful the experience of youthful progeny, gained when christening in the Pacific. Lunch and a dance brought round the time when the anchor had to be lifted, so at 5 P.M. we waved an adieu to our friends, and the gallant ship was soon on her way to Callao.

## CHAPTER VIII.

LEAVE ISLAY AND ARRIVE AT CALLAO — PECULIARITIES IN THE BAY —
DESTRUCTION OF THE CITY IN 1787 — LIMA VISITED AND DESCRIBED
— THE REMAINS OF PIZARRO — A PARALLEL BETWEEN CUBA AND
PERU—BATHS AT LIMA— THE DEATH OF ATHUALPA, THE LAST INCA 
— A TRIP TO CHORILLAS — MANNER OF ARCHITECTURE AND GENERAL
DESCRIPTION—LEAVE CALLAO AND ARRIVE AT PAYTA—EXTRAORDINARY
FALL OF RAIN IN THAT PLACE — EFFECTS ON THE TOWN — LEAVE
SOUTH AMERICA, AND START FOR THE SANDWICH ISLANDS.

Although the distance of Callao from Islay is only 354 miles, it was March 2 before we arrived at the This was mainly owing to the very light former. breezes we experienced all the way up the coast, when we expected the reverse; thus in a measure justifying the now oft-repeated saying, that the luck is not with us, and that wherever we go and whatever may have been the previous generality, our experiences are different to those recorded for our benefit. This stateof affairs is synonymous with arriving at any place in the wrong season, which seems peculiarly to have been our fate during the past year: a misfortune, not a fault, which has promise of rectification next year, when, by selecting the most advantageous time of visiting this interesting chain of ports, the most may be made of the slight difference which winter makes in them, both as regards climate and amusement.

But to go back to Callao. It was half-past one in

the morning when we arrived, so it is difficult to translate the uppermost impressions in one's mind regarding its appearance—unfortunately, as first impressions are generally truest and remain longest in the memory—so it was not till daylight came that we were able to see into what sort of quarters we had fallen. Here we found the 'Chanticleer,' several Peruvian menof-war, and one American. Close to was the famous iron-clad which did such good service when Callao was bombarded by the Spaniards six years ago. Built here during the war, such another in shape as the old ' Merrimac,' they had no iron plates to cover her with, so in lieu took the iron rails from the line which runs between Callao and Lima, and covered her all over with them; proving a most efficient protection, for she lay between the Spaniards and the shore firing away, while the shots from her adversaries glanced off from her sides, doing but little damage; so that the Spaniards were beaten off mainly through her agency. One frigate having a shell burst in her engine-room had to be towed out of action

The entrance to Callao is peculiar. Before arriving in the Bay you pass Cape Lorenzo, an island of great height, on the north-east extremity of which is placed the lighthouse, 980 feet above the sea. This height, which at first sight would seem to be an advantage as enabling the light to be seen at a great distance, is often otherwise, because at certain times fogs or mists prevail, enveloping the top of the Cape and lighthouse, for which reason we preferred to come in the time we

did when clear, instead of later in the morning, when it is generally thus obscured. Beyond this island, and separated from it by a narrow channel, is another of equal altitude, but less magnitude, at once striking the eye as having a resemblance to the Rock of Gibraltar; whilst here and there small rocks show that the whole range has evidently been the result of an earthquake thrown up by the sea, or some extraordinary convulsion of nature. In 1787 there was an earthquake, followed by an invasion of the sea, in some respects similar to that at Arica, when the old town of Callao was destroyed, and where it was is now part of the bay. This place is separated from us only by a long, narrow spit of land, which has all the appearance, from its regularity of outline, of a breakwater made by human hands, whereas it is, and I believe also the islands, attributable solely to that event. We have seen in our own lifetime localities erased and the appearance of others wholly changed; why then should not these peculiarities have come about in the same way? The soil of these islands is of the same barren and sandy nature which is common all along the coast; in fact, you have to go inland some miles before arriving at any signs of fertility. Another peculiarity is, that the people say that they are daily rising in height. They mean probably that the sea is receding instead, which would have the same effect upon the land and be more in accordance with the known order of things. town of Callao has been so often described by abler pens, and has so little in it to create interest, that I

shall not enlarge upon its beauties, and make no apology for at once proceeding to Lima. Besides, to tell the truth, I am as tired of trying to emulate Murray as I suspect my readers are of my feeble attempts. So to try another strain. Truly they were giants in those days! might not be the unapt exclamation when standing over the skeleton of the once great Pizarro: for know that his remains are to be seen to this day in the cathedral at Lima. Shades of Homer! ye keep the whitened bones, but what avail these, save as an ever present reproach to a country that founded empires beyond the sea unto a pitch known neither before or since. Where are they now? Where is all that glory which made Spain at one time the most powerful nation in the world? Her riches, foreign possessions, &c., gone, all gone; and why? I remember some years ago dining with a young Cuban of position at Havana. There were no signs of rebellion then, though the seeds were germinating; and in talking over the position of the island, I was surprised to hear this exclamation—'Ah! amigo mio, if we were only under the English or American rule; but these Spaniards, caramba!' 'What!' said I, 'you would rather be under the English rule than Spain, your mother country, speaking the same language, having the same religion, from whom you are all descended.' 'Yes,' said he; 'even with all that, a thousand times yes, and so would every Cuban in the island; before long there will be a tremendous struggle between Cubans and Spaniards, which will only end in

the extermination of the former or their independence.' How the first part has come to pass all know, and how the Cubans have struggled on against repeated reinforcements from Spain. It is not a rising in any one portion, but a revolution throughout the whole island, and the end will be, as in Chile and Peruindependence! How then can we account for this extraordinary characteristic of Spaniards, that they cannot retain their colonies? It is in one word-intolerance! I am not speaking simply in the narrow sense of religion, but of everything: forcing imposts on these conquered countries till they become too heavy to bear; treating them with suspicion and injustice in not allowing them any voice in their own government—for it is one of the chief causes of the revolution there that no Cuban may hold a government appointment; they are all filled by Spaniards sent out for the purpose—till at last tired of waiting for better times, they throw off the yoke and declare their independence. Unwarned Spain has gone on losing colony after colony till of all her vast possessions but little is left. Fortunately, England was warned in time by the revolt of her American colonies, and has since inaugurated a new policy towards them—one of justice and conciliation; so that since then, instead of losing any of her possessions, they have gone on increasing in strength, and will ere long, like a man's shadow on the pavement, surpass that from which they derived their being. It is easy to imagine the chagrin felt by Spain in losing these fine countries, and the folly of past

misgovernment. They are lost for ever, and she can never regain the position once held among nations; but may better the present state of affairs in her own country, and to that, if wise, she will turn her attention in earnest.

Meanwhile Peru flourishes, though more from European than native assistance; and in Lima is largely found the cosmopolitan element which draws her on in spite of herself-railways constructed, docks built at Callao, new mines being opened, and an impetus given to trade not known before. The capital has about its appearance all the peculiarity of architecture so attractive to the eye in old Spanish towns. Founded by Pizarro during his march through Peru in 1534, it has since undergone many vicissitudes of fortune, from earthquakes, internal revolutions, &c.; but retains in the cathedral and other public buildings enough to show that once it deserved the title given it by the conqueror, 'City of the Kings,' for I have seldom seen surpassed in design or execution the carving on the exterior of some of the churches 340 years old. cially marked is this in the cathedral, so that it is disappointing not to find in the interior a corresponding beauty. But it is flat and tawdry; dirt reigns supreme, and of ornament but little-a strong contrast to Western churches. When Pizarro died, his body was embalmed, and placed in one of the vaults. Of late they have been rather chary of admitting strangers to this place, who, from a morbid taste for repulsive curiosities, were in the habit of abstracting bits of bone

or his winding sheet. But, by producing a piece of silver, my companion and I had no difficulty in persuading the guide that our intentions were not felonious. So we descended down into a dark vault, where drawing aside a rag of a curtain in a niche of the wall, lay the skeleton almost perfect, with what once may have been a sheet thrown lightly over it. Such is the most honoured burial they can give thee, oh! man of undaunted courage! who, with three ships and two hundred men, set out to invade South America, and founded that vast empire! Could you but see your unhappy country, methinks those bones would receive a new spirit and come forth to reproach the degeneracy of thy descendants! It was with minds chastened by these reflections that we turned our steps to another part of the town where rumour had localised a most desirable luxury, viz., a swimming bath, the fame of which we found on reaching the place was not confined to us alone, but had extended to many of our brother officers, who, clad in the minimum of clothing, were revelling in the manner most congenial to the Anglo-Saxon race; for if there is a subject upon which Englishmen—according to foreigners—are a little monomaniacal, or upon which they themselves might be led out of their natural modesty to say, 'I am not as other men,' it is in their predilection for cold water; adding in the nineteenth century a new verb to our language, 'to tub,' said now to be used often in the interrogative mood when matrimony is contemplated, as a necessary qualification: to such an extent has the mania become general. Whether this characteristic is a weakness or a virtue I am not here to discuss; those social questions are best left to the 'Saturday Review.' I was merely desirous to correct any false impressions of levity of conduct on our part in stepping out of a cathedral into a swimming bath, before entering into any further description.

There was something certainly very inviting in the construction of this establishment, and the ornamental had been combined here with the useful in the most felicitous manner. Supplied by an ever-changing stock of fresh water continually passing in and out by the means of small fountains placed all round, half hid by beautiful tropical plants, which ascended by pillars to the roof, and hung over the water in graceful festoons, you felt here was the prototype of the luxury as enjoyed by the ancient Romans, and described by the authors of that period. Adjoining was a ladies' bath, separated only by a low wall, which did not debar conversation or impede the sight; but, as I said before, all were arrayed in sumptuous attire, without which there was not anyone there that was there. It being lunch time, the market was next visited, proving most unattractive in its dirtiness, though large and well supplied; so we turned into the Public Library, to see the celebrated picture representing the death of Athualpa, last of the Incas, who was executed in a most unjust Here he is just dead, and the priests are hanging over him, for he was converted shortly before, while Pizarro is standing in the foreground. In the

background are several beautiful women, wives of the chief, trying to get to the body, but kept back by Spanish soldiers. It is beautifully painted; the expression of the faces so vivid! In the conqueror stern resolve; in the priests triumph; in the women grief; in the soldiers brutality; whilst in the chief figure a deep calm contrasts with the storm of passions which surround it. It was, I believe, painted at Florence four years ago, but I do not know the name of the artist.

Lima is distant from Callao eight miles; and, to all appearance, the interval between them is perfectly flat, but this is one of those visional deceptions justified by such a gradual incline as 1 in 88, so how Humboldt and other travellers could see on this point anything extraordinary, it is difficult to imagine, unless to gain in narratives of strange countries a fictitious interest by surrounding common-place peculiarities with a mysterious halo. Callao, as the present outlet of commerce, has little but what is unpleasant, being dirty and uninteresting, so that it is fortunate a railway soon places one in the more agreeable capital, where bright eyes and richly furnished warehouses, displaying the best wares from all nations, are a relief after the desert towns on the coast. The women of Lima have long been noted for their beauty, and though you do not find it so general as in some parts, individual cases showed that often a little Indian blood assists to give a rare beauty to the face. Any sketch of Lima and its environs would be most imperfect without some account of the famous bathing place, Chorillas; but unable, by circumstances over which I had no control, to pay it a visit, I take the liberty to transcribe the following account by one who was more fortunate:- 'C. and I having heard a great deal of the fashionable wateringplace Chorillas, started one afternoon from Lima with the intention of proceeding thither by the train which left Lima about 5.30 P.M. Chorillas is about twelve miles from Lima, and on the coast, about eight miles to the southward of Callao. It is a favourite place with the Limenians, being, in fact, their only wateringplace. We caught our train, and after a journey of forty minutes' duration arrived at our destination. Built on a low cliff, which runs round the bay and whose descent is steep, I never saw a place where more advantage had been taken of every spot available for building. The houses are very close together, and the streets narrow, but the houses are nearly all villas, nicely built and pleasing to the eye. The first thing which struck us on leaving the station was the number of pretty faces to be seen in nearly all the houses, curious to inspect the arrivals by train: doors and windows were thrown wide open. But as we got further into the town and were threading our way through the narrow streets towards the sea, we were perfectly and agreeably surprised to find on each side of us houses with one room, as it were, entirely open, being separated from the street only by a few iron bars. These rooms, or sort of balconies, were full of fair Limenians, some lying in grass hammocks; others lolling in easy chairs,

or standing chatting and criticising the fresh arrivals. The whole reminded us in a ludicrous manner of the Zoological Gardens in Regent's Park, with the difference that here pretty girls were caged instead of wild animals. It was the most pleasant time of the day, about halfpast six, when we sauntered down to the sea. arriving at the edge of the cliff, we found a regular and well-made promenade running along the top, houses larger and of a better description looking over it, all with open windows and doors. The esplanade is made of stone, with smooth well-laid gravel walks. bathing establishment, some eighty feet below, consists of a long wooden house, part for the use of gentlemen and part for the ladies, from whence all issue forth clad in a sort of bathing dress and shoes; these meet in the water on quite easy terms. Nearly every one carried his or her own life buoy, as there is rather a heavy swell. It was tempting, but late, so after looking on a short time we trudged up the hill again, and made our way to a small hotel in order to get something in the way of dinner. Fortunately we came in time for table d'hôte, and found two vacant places, but the room being full and waiters scarce, we were at considerable disadvantage in our limited knowledge of the language, which only enabled us to hurl occasional phrases after the waiters as they hurried by, but to which for a long time they paid no notice. At last, when our patience was well nigh exhausted, as our Spanish had been long ago, we managed to get something, and then strolled down to the Esplanade, to listen to a band which had

come from Lima for the purpose. It began to play about eight o'clock, by which time the Esplanade was thronged with ladies and gentlemen. We certainly had a good glimpse of Lima society. The ladies were attired in evening dress, as the climate is delicious, and the effect of their bright coloured dresses was exceedingly picturesque, for they are all fond of bright colours.

'After walking about a short time, and meeting a few brother officers, who appeared not to be strangers like ourselves, we left in good time to get to the train before the general rush; and passing up the street were amused to see that the servants of the different houses were now occupying the sofa and lounge in the front rooms whilst mistresses were out. Our train was very full of visitors from Lima, nevertheless we managed to arrive in good time to catch our train to Callao, which we reached at 11 P.M., having thoroughly enjoyed a few hours at Chorillas.'

The pleasure of our stay at Callao was much diminished by the great heat, for which a naval costume is not well adapted. Weather that was said to be quite exceptional, especially when compared with former years, for whereas at this season the thermometer generally ranged from 58° to 60° Fahrenheit, it now seldom shows less than 80°, whilst the temperature of the sea ranges as high as 85°. It is this change, both as regards the increase of heat and difference between the sea and atmosphere, which has given rise to a belief that Callao at no distant date will be visited by another

earthquake. One sign that came under our own notice was, where we lay at anchor in the Bay continually were coming up from the bottom large bubbles of gaseous matter, which burst on arriving at the surface, scattering and spreading all round a dark earthy mixture, and impregnating the water most unpleasantly. This I attribute to volcanic action going on below.

On March 7 there was a dance on board the 'Chanticleer; and on the 11th, the day of our departure, a luncheon party of about twenty ladies and gentlemen terminated likewise. The same day we had the misfortune to lose one who, having come out from England with us, had, by his amiable disposition and sterling worth of nature, endeared himself to all; but forced to return to his native country in a few months, he took advantage to join the 'Chanticleer,' which ship would shortly proceed home. The last day at Callao will always be remembered with regret as the day on which we said good-bye to Axel Proet, of the Norwegian Navy. Payta was reached without incident on the 16th, and the mail steamer came in the same day. We had heard at Callao that Payta had been subjected to an almost unprecedented downfall of rain, flooding the whole place, rendering the houses untenable, and obliging the inhabitants to navigate the streets in canoes, so were somewhat curious to see the present effects. We ourselves had experienced heavy showers nearly the whole way from Callao, but when within forty miles of Payta, it became quite fine and continued so. As we had only put into Payta to catch the mail, and

would sail the same evening, all who could made their way on shore to inspect the town after such an unlooked-for visitation. The rain began on February 25, and continued without intermission until March 8, by which time all parts were flooded, and the story of canoes was no fable. We arrived more than a week afterwards, and even then water was running through drains, which were constantly being emptied. principal was about six feet wide and three deep, besides in all the other streets smaller ones of about three feet by two. The doors of all the houses were blockaded up by boards two feet high, and it was necessary to have planks on the footpaths. On inquiring from some of the old inhabitants the interval of time between different rains, we heard that they remembered rain in 1828 and again in 1843. There was some slight difference of opinion, but all said it was twenty-five years since they had had any rain. Being, therefore, almost as great a stranger to them as ice would be, houses are built with a total disregard to a contingency of this sort, and composed chiefly of bamboo and mud. The latter condiment not being able to withstand the steady downpour, houses soon became untenable, while dwellings of less primitive description suffered considerable damage in roof and ceiling. The Chira river, of alligator fame, overflowed, causing great damage to stock and land, also apparently to the alligators, for we observed several bodies that had been washed up on the beach by the floods, though the river is fifteen miles off. In the one short space of 100 yards we

noticed four; but time did not allow us to make further observation, having to return on board.

The mail brought no news of importance. All doubt about the Russian question seems to be at an end, though the result of the conference is not known. The telegraph informs us that peace between France and Prussia is a certainty. There being nothing therefore to prevent our proceeding on our journey, that same evening we got the anchor up, and started for the Sandwich Islands in the Far West.

So we bring to a close our first visit to the South American Continent; and though it cannot with truth be said, that in some ways disappointment did not come upon us, yet, on the whole, pleasure largely predominated, as where will it not when all is novel, and their ways not our ways. For under those conditions, in the apparently most uninteresting spot on this earth there really exists a mine of interest; and, if in describing these places, we have been led in some instances to give too gaudy a colouring, or incline to prolixity, let the excuse be in those most appropriate words of Old Burton: 'For he took great content, exceeding delight in that his voyage. As who doth not that shall attempt the like? For peregrination charms the sense with such unspeakable and sweet variety, that some count him unhappy that never travelled, a kind of prisoner, and pity his case that from his cradle to his old age he beholds the same still; still, still, the same, the same!'

## CHAPTER IX.

PASSAGE FROM PAYTA TO THE SANDWICH ISLANDS—AMUSEMENTS ON BOARD—ARRIVE AT HONOLULU—NEWS FROM FRANCE—DESCRIPTION OF HONOLULU AND THE NATIVES—INSTITUTIONS AND LAWS—THEIR ORIGIN AND GOVERNMENT—CHARACTERISTIC LOYALTY—THE PALI—THEATRICAL PERFORMANCE ON SHORE—VISIT OF QUEEN EMMA TO THE SHIP—HER AMIABILITY AND POPULARITY—LEAVE HAWAII AND GO OVER TO MAUI—A TRIP UP THE MOUNTAIN—HOSPITALITY OF CAPTAIN MC KEE — VISIT THE GRAND CRATER OF HALEOKLA — START FOR SAN FRANCISCO.

THE journal of a ship's commission on the Pacific station would certainly be incomplete without some record of the sea cruises which claim such a large portion of time, especially in an iron-clad, in whose construction speed under sail was not a serious consideration. And yet these journeys, though of great extent, present such a slight degree of variety, that one account might almost do for all. Day after day passes on, and is a counterpart of the preceding; everything remains the same; nothing to be seen but a vast expanse of water, shut out from the world by a notto-be-realised gulf, measured by thousands of miles. Therefore, though the voyage to Honolulu is in distance about four thousand eight hundred miles from Payta, and took us forty-one days to accomplish, a brief review of the principal features will suffice for the connection of our story.

For a little more than a fortnight we proceeded to

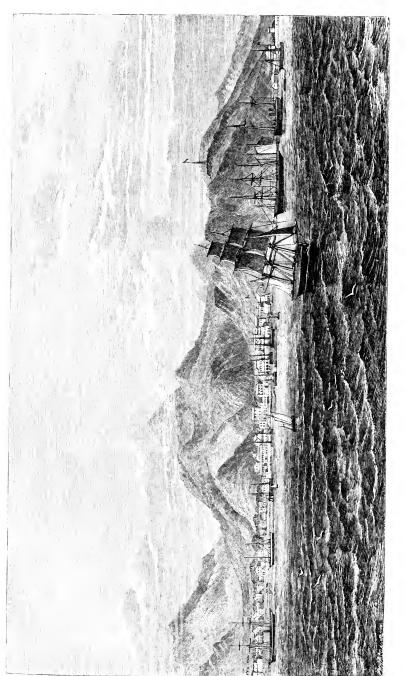
the westward, a short distance south of the equator, visited by perpetual showers of rain, and keeping the south-east trade wind, with occasional interruptions of regularity. Commencing again our evening amusements, we were much instructed by a lecture from Mr. T-, on Torpedoes, explaining the different descriptions, and how they are exploded by electricity. An illustration to fire one of our guns by electricity was attempted, but waiting a few moments in suspense, the fuze-one of Professor Abel's-was found, owing to having been on board the ship a long time, to have lost its properties, and was able to sustain the shock without effect. The next lecture was on the War from Sedan up to the present time, which was placed before the audience with clearness by the Admiral; it especially finding favour with our worthy chaplain of Teutonic extraction, who proposed the vote of thanks; but in the discussion that followed appeared a general disinclination to believe in the angelic nature of Bismarck or his countrymen.

On April 2 we bore up for the equator, and during the next week experienced most unpleasant weather, nothing but rain and calms, in fact, the doldrums, which we arrived at sooner than anticipated. Previous experience tells you that the south-east trade will carry you across the line to 3° north, when come the calms. We found them in 1° south, and had four days' steaming before and after crossing the line. On April 7, when in latitude 2° 50′ north, whilst under steam and sail, with light south-west wind, a tremendous shower

of rain came upon us, in the middle of which the wind increased and quickly drew to the northward, obliging us to tack. It then shifted to north-east and decreased. This is the usual manner that you go from one trade into another, and our losing the south-east so soon will probably account for finding the north-east at a lower latitude. The weather was most oppressive, for the rain necessitated the covering in of everything to the exclusion of the slight air, which just makes it bearable. This continued till the 11th, when fine weather set in, and the trade gave indications of increasing strength, so that a month after leaving Payta we were within two thousand miles of Honolulu. On April 19 we made a day's run of 171 miles, and on the 21st 175 miles: this, to us, is unusual.

A lecture on the loss of the 'Captain,' from Mr. C——, proved interesting in its practical nature; for an excellent model of that ship had been constructed, and one of those receptacles of water supplied as a bath was called into requisition to test the stability. Unfortunately, in the laudable desire not to err on the side of danger, she was made too safe, and would not capsize; but the conditions which brought about the sad incident were most clearly explained. The more we think over that frightful catastrophe, the horrors of which we can only hope were but of a few moments' duration, then imperfect though such a realisation and picture must be for the mind to conceive, so much the more are we impressed that as far as human power and skill can avail, such an event under those circumstances

must never occur again. On the 24th, aided by a favourable breeze, the day's run showed 184 miles, the most we have yet made under sail; and, retaining the wind, anchored, on April 26, off Honolulu. This did not take place till 8 P.M., so it was the following day before we received the mail bag, which a long absence from land had rendered bulky. Then we found that the rapidity with which important events have succeeded each other during the past nine months had not decreased; for though anticipating confirmation of peace, the terms under which it is concluded—not severer, however, than the rest of the world anticipated-must, in a nation like the French, foster such a bitter feeling of mortification and hatred as to render certain the renewal of the struggle the moment they feel at all able to cope with their old antagonist. As in July 1870, Napoleon III. felt powerless to avert or resist the shout for war which echoed throughout France, so also will that man, whoever he may be, who shall be at the head of the nation when, after an interval of time, reorganisation shall have taken away the distrust of success, but left the desire for vengeance. Knowing the focus of revolution that Paris has always been, and the fearful spirits nurtured there, it was not difficult to foresee that the first opportunity would be seized by the extreme and restless faction, that will stop at nothing to attain their own ends, and who have now taken upon themselves to plunge the country into civil war, commencing operations by shooting two unfortunate generals, who had fallen under their displeasure. Reviving the old name of La Commune, they think to impose on their countrymen by lofty axioms, under cover of which they commit the basest crimes. Such a cause cannot hope for success. Here we heard of the Washington Treaty to enquire into a manner for settling the Alabama claims and other questions. Though composed of the most able men, it is difficult to see how any conclusion can be arrived at considering the diametrically opposite view which each country takes of the Alabama question alone, held with great pertinacity now for some years. But as involving the question of settlement by arbitration, it is a great advance; and if these conflicting matters can be settled without receding one inch from the position we have taken up, or in any other way wounding the national pride, wonders will have been accomplished. We await the end with curiosity. We anchored about one mile and a half from the town; the view of which and the surrounding country from the sea is very pretty, for everything was green, and though by the hills there are evidences of volcanic influence, it appears to have outlived the disease, and earthquakes are almost unknown. The bay is beset with reefs, and though there is a passage to an inner harbour, it is only practicable for vessels under twenty feet draught. Therefore we had to lay outside, where the swell sets in, causing considerable motion: doubly unpleasant when at anchor, being not bargained for. We have The surf breaks in a succession of our fill at sea. long rollers along the reefs on each side of the





entrance to the inner anchorage. When once arrived inside these reefs the harbour, though small, is well protected.

Honolulu is the principal town of Oahu. The island of Oahu is forty-six miles long by twenty-three broad, being one of the Hawaiian group discovered by Captain Cook in 1778, and named by him the Sandwich Islands. It was at Hawaii, the largest of the group, that the celebrated navigator met his untimely end, to the infinite loss of his country; for among the many brilliant names which adorn the naval history of Great Britain, few shine with greater brilliancy than that of Cook. It must appear almost miraculous to us who know the slender knowledge of the science of navigation possessed in those days, to see what Cook performed, and the accuracy of his observations. The position of this group, which consists of ten islands, is very central, as they serve as a halfway house on the way to China, Japan, and Australia, to steamers which run to and from San Francisco once a month. They have also always been greatly resorted to by whalers when in want of supplies. For sailing ships they are easily attained, lying as they do under the constant influence of the trade wind, which blows for nine months in the year with great regularity.

Population has decreased very much since the period of their discovery, for several reasons, the principal one being that infanticide has extensively prevailed until very lately. The natives are supposed to be of Malay origin. Their language is in some respects similar; and

they subsist even now to a great extent on the root of the 'Taro,' baked, pounded, and mixed with water, then allowed to ferment. This preparation is called 'Poi,' and has very nourishing qualities. They are a fine race of men, vastly superior physically to the various South American races we have hitherto met in the small republics, and appear to have a high sense of their moral obligations, for crime is an exception, not the rule, and the little community is governed by an excellent code of laws, many of whose provisions we might copy without disadvantage. Their punishments are severe; but you do not there often see an offender have at conviction several previous charges proved against him, or in prison twice for the same offence. No doubt the system of government pursued has a tendency to elevate the minds of a race like this, whereas in the South American republics there is nothing to help any good instincts that may be latent. But in the Sandwich Islands there has always been a strong feeling of loyalty towards the sovereign, and it is to this feeling-for I would place loyalty next to religion as an elevator of nature—aided by personal attachment, that has given them so many characteristics we should not expect to find in a once savage race. The present sovereign is Kamehameha V.1 was away, however, on another island looking after one of his estates, for he is a great grower of sugar, and has less of kingly attributes than former ones; but the Queen Dowager Emma, who is much beloved,

Since dead

and exerts by life and character a most beneficial influence upon the natives, was at Honolulu, and gave to all who called on her a kindly welcome. She has a nice house in the country, also one called the 'Palace,' with pretty gardens attached, in Honolulu, where her band, consisting of about forty boys, generally plays in the evening, and play exceedingly well. The native women have not much pretension to beauty; their figures generally are fine, though inclined to embonpoint. They ride remarkably well, sitting the horse in the same manner as a man, for which they wear a loose sort of skirt, tied round the waist and coming down on both sides, whilst for head gear a wreath of flowers often gives the tout ensemble a very picturesque appearance. Their ordinary dress is best described as a very long species of night-gown, generally of a bright colour, hanging loosely about the person, more adapted apparently for comfort than elegance. Both men and women are of cheerful disposition, always anxious to oblige and render any little civility in their power. We allowed our men to go on shore, and they were very well treated, amusing themselves chiefly in riding helter-skelter all over the country, for nothing 'Jack' delights so much in as getting outside a horse, and, though not renowned for grace in that accomplishment, has at least the faculty of being able to stick on under the most adverse circumstances.

The road inland from the town leads across a low part of the mountain range, forming the backbone of

the island. The view from the summit, looking down to the north-east, is very grand, and, as you then first meet the force of the trade wind, most refreshing. This part is called the 'Pali.' After crossing over the top the road descends very abruptly, as the mountain range is precipitous on the east side. You wind down a stony road-but the horses are sure-footed-and at the bottom come upon an extensive plain, where grows the sugar-cane in various plantations. A party of us took a ride out one morning, having been invited by the owner of a large plantation to inspect his sugar-mills. We took guns, for wild duck can be obtained here in great quantities at a certain season of the year; but, as usual, this was the wrong time, and the few we saw were too wild to be approached. After dinner we had a pleasant moonlight ride back, though it was late before we got in, for the steep ascent of the Pali had somewhat taxed the endurance of even these stout little horses, and necessitated a slow rate of speed.

Honolulu, though small, is clean, and well stocked with all the necessaries of life. A brisk trade is carried on, principally with sugar to America; and there are merchants from all countries, although Americans predominate, and hold most of the chief appointments under the king. There are a great many Protestant and Roman Catholic churches and schools, which may be attributed to the efforts of missionaries who flocked here at one time. Mark Twain says, speaking of Honolulu: 'If you get into conversation with a

stranger in Honolulu, and experience that natural desire to know what sort of ground you are treading on by finding out what manner of man your stranger is, strike out boldly and address him as "Captain." Watch him narrowly, and if you see by his countenance that you are on the wrong tack, ask him where he preaches. It is a safe bet that he is either a missionary or captain I became personally acquainted with of a whaler. seventy-two captains and ninety-six missionaries. The captains and ministers form one half of the population; the third fourth is composed of common Kanakas, mercantile foreigners and their families; while the final fourth is made up of high officers of the Hawaiian Government. And there are just about cats enough for three apiece all round.'

There is, perhaps, a little exaggeration in this sketch by the humorous traveller, but it expresses in the main pretty accurately the place as it was a few years ago. Now increased communication with America, and development of its resources, has added other ingredients to the population. The introduction of a theatre and concert-room also shows the progress civilisation has made. Our officers' Amateur Dramatic Company, having carefully prepared some pieces whilst on the passage from Payta, debarred by the rolling of the ship from having a performance on board, determined to give an entertainment on shore in aid of those unfortunately left widows or orphans by the late war between France and Germany. Accordingly, the theatre was visited, also the concert-room, called Buffum's

Hall, after a celebrated physician of that name, who at one time practised in this town till pecuniary difficulties was the cause of his extending his travels, and taking those talents to a more appreciative country, leaving this hall which he built in the hands of an agent. The theatre being used but seldom, or whenever a company came across from San Francisco, was found to be, though a pretty little house, somewhat dingy; whilst the hall—besides being preferred by Queen Emma, who had consented to patronise the performance having a good stage, also possessed all other requirements in a greater degree, so was accordingly chosen, and May 3 fixed for the performance. Every assistance was rendered in the most generous way by people on shore, in lending appliances, and by Mr. Thrum, the librarian, in disposing of tickets, so that when the evening arrived the hall was crowded, and many had to be turned away for want of space. The following extract from the 'Hawaiian Gazette' of May 10 is a good description of the performance. 'The dramatic entertainment given by the officers of the "Zealous," on Wednesday evening last, in aid of the relief fund for the widows and orphans of the late war, was a perfect success in every respect. The hall was crowded long before the hour arrived for the curtain to rise. The entertainment being under the patronage of Queen Emma, the performance did not commence until her arrival. Her Majesty entered the hall at eight o'clock, and was escorted to her seat by Admiral Farquhar, the audience rising, and the band playing the national

air. Previous to the curtain rising, the manager, Lieut. Wilmot, appeared before the curtain and delivered the following prologue, of which he is himself the author:

' If for our thoughts there could but speech be found, .And all that speech be uttered in one sound, So that some power above us would afford The means to make a language of a word, It should be Welcome: in that only voice We greet you all, and at this vision much rejoice, To see so many friends all moved with pity For war's sad victims, in this fair city; The orphan, widow, and peasant bereft Of all that makes life valued; alas! what's left, Save mourning faces and fields laid waste, The bitter fruit of war begun in haste? So we've invoked your aid and helping hand To send relief unto that suffering land; And not in vain, as show these crowded ranks, For which we express our deepfelt, grateful thanks. But before presenting our little troupe to you, Doubtless some few words are justly due. Five thousand miles we've come 'tis true, To see the far famed town of Honolulu: Some little training on the way we've had, And if not good, we hope not altogether bad. Of you then, mighty critics, assembled here, We ask an indulgent eye and ear; We try to please, -- oh take it not amiss--And if you cannot cheer, pray do not hiss. Laugh if you can: if you cannot laugh why weep; When you can keep awake no longer, fall asleep.'

'The prologue elicited numerous flattering comments. The appearance of the neat little stage, as well as the style of the pieces presented, reminded many present of the old Thespian Club of former years. The opening piece was the capital farce of "Boots at the Swan,"

and was followed by an interval, during which Mr. Ommanney sang a comic song in character, which received a decided encore. A portion of the band of the "Zealous" played during the intermission, and performed some delightful music. The comic farce of "Slasher and Crasher" concluded one of the best entertainments that has been given in this city for some The acting throughout was really excellent, and each character was performed in a manner that would have reflected credit upon regular professionals. make-up of the "lady" members of the company was splendid, and each of them acted their parts to perfection, particularly "Miss Allen," who appeared in both pieces, and made quite a charming and good-looking young lady—rather healthy, perhaps. Mr. Corbet, as "Jacob" ("Boots of the Swan"), Mr. Baring, as "Captain Friskly," Mr. Ommanney, as "Pippin," and "Miss Allen," as "Sally," acquitted themselves admirably in the first piece. Mr. Brimfield, as "Mr. Blowhard," in the second, exhibited fine qualities as a comedian, while Lieutenant Wilmot and Mr. Corbet, as "Slasher" and "Crasher," kept the audience in continual good humour throughout the piece. From the fact that the company had not given a performance since leaving Valparaiso, it was a matter of agreeable surprise that they were able to acquit themselves with such perfection, especially before so many ladies. The generous efforts of the officers in aid of the cause for which the entertainment was given will long be remembered as a pleasant reminiscence of their first visit to Honolulu. It was their

intention to have given another performance for the benefit of a local charity, but the shortness of their stay prevented them from doing so.'

After paying all expenses, the sum of 28l was transmitted in equal portions to two funds in England having for their object the purpose of this entertainment; and considering the size of the hall, which can only accommodate about 180 people, it was looked upon as a result exceeding the anticipations of the most sanguine. Queen Emma, accompanied by a numerous suite, came on board the next day to lunch with the Admiral, and as the ship occasionally rolled considerably, we had prepared a state chair out of a cask cut into shape, and covered with red baize, which was slung to a whip all ready to hoist out her Majesty. It really looked quite royal, and we were not a little proud of our performance, therefore felt slightly disappointed that a few steady moments enabled the party to ascend the ladder without its assistance. But on going away she expressed a wish to go out in the 'tub,' as she called it, so was accordingly hoisted out with great éclat. She seemed much pleased with the ship, and expressed herself highly gratified by the previous evening's entertainment. Though no longer young, Queen Emma is still pretty, dark, with beautiful eyes, and of a most amiable disposition, so that she is very popular with everybody. Speaking English remarkably well, she might easily be mistaken for an European; for, having been a good deal in England, she has copied the manners and style of dress, and in

complexion only shows her native origin. The next heir to the throne, King Kamehamaha being unmarried, is a certain Prince Billy, rather addicted to conviviality, but withal popular for possessing many good qualities. The sovereign has it in his own power, I believe, to name his successor, and therefore complications may arise at his death should he have been influenced by bad advisers. It is the opinion of many that after the death of the present king these islands will fall under the dominion of America, for our influence has nearly all gone there. Such an occurrence would be much to be regretted, insomuch that I do not think even the superior advantages offered by a republic, of which America affords such an example, could tend to more rapid improvement or produce better results than has been the case under the present system -a system of government which all nations might not be ashamed to copy, in that it inculcates the precepts of morality, law, and order in a higher degree than can be boasted by many nations civilised by centuries.

It was with great regret at the shortness of our stay, and a hearty wish for a continuance of prosperity and maintenance of their present relations, that we found ourselves compelled to bid adieu to the charming little town of Honolulu, and get under weigh for Maui on the 6th, another island, some forty miles distant, which we intended to visit before finally starting for San Francisco. A strong head wind, necessitating the use of steam, did not permit us to arrive at our destination till early on the morning of the 8th. The

island of Maui, like the rest of the group, is of great altitude; in fact, it might be described as a mountain island, but divided into innumerable peaks, such as are always seen where volcanic influences have been at work. The lower part is barren and covered with tufa, making it most unpleasant walking, while here and there are huge boulders several feet high. There were a great number of pigeons among these rocks, which at once became the object of several guns, and it was not until too late that we discovered they had been imported at some expense by a gentleman residing there, who did not wish them to be exterminated, but to increase and multiply. This gentleman, whose name is McKee, has a large sugar plantation some distance up the mountain, and he having most kindly placed his house and horses at our disposal, a party was made up to visit the great extinct crater of 'Haleokla' (House of the Sun). Accordingly nearly a score of us landed in native canoes, for the surf was too high for our own boats. These canoes are peculiarly constructed, and admirably adapted to carry several people safely, by a very simple contrivance, which consists of a long spar rigged out on one side, resting in the water parallel to the canoe, and connected with it by a smaller spar at each end. The effect is that on this side the weight may be placed without immersing the canoe, while at the same time there is little loss of speed or increase of weight. It is astonishing what a difference in stability is thus made to a cranky canoe.

On shore a number of horses awaited us, so we pro-

ceeded up the mountain, and after a pleasant ride, with the exception of one shower, reached the mansion of Captain McKee, who received us most kindly, supplying clothes of his own to those who were wet. The house consisted of seven or eight detached cottages standing in the centre of a large garden. At the back the hillside was covered with sugar plantations, in which hundreds of peacocks were preserved. The cultivation of sugar is the employment of this gentleman, which article he exports largely. The climate is peculiarly favourable to the growth of this plant, though hurricanes occasionally do great damage. On this estate the cane is grown; then the mills are at hand where it is made into sugar, and placed in barrels for exportation. I should mention that we brought over from Honolulu two ladies who were going to pay a visit to this family, and who came up with the advanced guard of the party. In addition Captain McKee has six daughters, varying in age from ten to twenty-five, so that we sat down to dinner a very jovial party. Although in the tropics, the climate was delicious, so cool and conducive to energy that when the afternoon had been passed variously-in flirting, billiards, or riding-it was felt that a dance was necessary; so whilst we cleared the drawing-room a messenger was despatched with three horses down to the ship for some musical performers. In the interval of sending them ashore three middies, having landed, observed the patient steeds, and, struck with the coincident number, soon disappeared up the hill at a gallop, though not without some ques-

tioning on the part of the messenger as to whether they were the gents expected, which there was no reason they might not be. Accordingly, when three accomplished musicians arrived, they had to struggle up the hill on foot, and, after a long delay, were seen approaching, reminding one forcibly of that ubiquitous German band which at home always wakes you up at six in the morning by a feeble attempt at 'Trovatore' under your windows; consisting generally of a big fat man with a piccolo, a little thin man with a bombardon, and a boy with a cornet. In this case the boy succumbed, and had to be carried by the thin man, while the fat man brought up the rear, all in an exhausted condition. However, liquid restored them to animation, and soon our miniature ball commenced. We kept it up till nearly two in the morning, when nature compelled us to retire. As our party was large it was requisite that each bed should contain two. One, however, we being an odd number, was fortunate in having a large sofa to himself, so testified his joy by smoking the whole night there, and was observed in exactly the same position when some of the party got up the following morning at 4 A.M. to start for the crater: however, then he seized a just vacated couch, and wasting no time to disrobe, was instantly in a deep slumber. Of the visit to the crater the following account has been furnished by one of the party.:-

'The crater of "Haleokla," distant about eighteen miles from our starting-point, is on the summit of a mountain in the south-east portion of Maui, at an elevation of 10,200 feet above the level of the sea. Horses and guides having been provided, we started (a party of seven officers) at four in the morning.

'After passing through fields of sugar-cane for about a mile, guided by the struggling light of the waning moon, we left cultivation behind, and entered upon a virgin soil of decomposed lava, covered with rank weeds, shrubs, and brushwood. Day dawned about five, exhibiting a wooded hill on one side, and on the other, beneath a low stratum of cloud, which hung like a curtain round the island, we looked across the channel, with its white-crested waves, to the dark shores of Turning our eyes towards the mountain, peak after peak rose to a towering height, and bye-andbye the sun began to bathe the lofty ridges in golden light. As we advanced the soil varied; sometimes our horses sank to their fetlocks in pulverised lava, at other times they stumbled over rugged blocks. Anon we cantered over a rich soil, with a thick bottom of fine spear-grass; flowering shrubs scented the air, and berries of various kinds hung in branches from others. A species of heath also abounded. About half-way to the summit we rested on a spur of the mountain facing the north-west, and, the clouds having disappeared, we had a glorious view of the distant islands of 'Molokai,' Ranai, and Tachoorowa; on the slopes of the mountains were large sugar plantations; and beyond the low neck of land connecting the extremes of the island rose massive hills, with richly cultivated sides. ship, which was visible, looked like a tiny sea-bird

floating on the ocean. The air was now becoming keen, and occasionally a cold mist swept across the face of the mountain. Vegetation continued until within two miles of the summit, and probably a thousand feet below it, when we entered on a desolate region of powdered lava, cinder, and scoriæ. Before reaching the grand crater we passed three smaller ones, the largest about a mile in circumference and about three hundred feet deep. From one of the highest ridges we could see the mountains of Hawaii above the dense masses of clouds clinging to their sides, the summits tipped with snow, and one giving forth a stream of smoke. The highest, Mauna Kea, is 13,953 feet above the level of the sea, an active volcano of the grandest description. The last eruption, in 1868, broke out on the side of the mountain, and was most destructive, being accompanied by an earthquake and a huge wave which swept with irresistible force over the low coast, overwhelming several villages. During the ascent we had not heard the chirp of a bird, nor seen an animal of any description until near the summit, when we suddenly came upon a flock of wild sheep, that scampered away at our approach. If deer were introduced, as they have been into some of the other islands, they would find abundant pasture.

'I may here note a curious piece of knowledge on the part of one of the guides, who, on being asked what time it was, exhibited a crude idea of the sundial by drawing a cross in the dust, and placing a small stick upright on what he conceived to be the

meridian line, observed where the shadow fell and gave the hour pretty correctly. At 9.30 we reached the edge of the great crater, which is about twentyone miles in circumference, and from its very size is not striking, being, in fact, a depressed plain, 1,500 to 2,000 feet in depth, studded with small volcanic cones. The sides are in some places perpendicular, but generally of steep descent. There is no record of this volcano having been in eruption, and the date must be remote, as the most recent lava shows signs of vegetation on its surface. Almost immediately after gaining the summit the mist began to roll in through the hollows of the ridge and to fill the crater. mounting from our wearied steeds, we were glad to seek shelter from the cutting wind under the lee of a semicircle of stones, which had been piled up by former visitors, where we unpacked our basket and enjoyed our morning repast, none the less acceptable for its frugality; nor did we suffer inconvenience from the rarity of the air owing to the height of our posi-We fell in with a beautiful specimen of the cryptogamous ice-plant. Our naturalist describes it as of the class Thallogens, with spreading fronds. We found it growing out from the fissure of a rock, and gathered a quantity of its silver, velvety leaves, which retain their beauty and gloss after being pressed. Half an hour sufficed us to take our fill of the gloomy scene around us, and then we commenced to descend, enshrouded in a thick mist, which would have rendered our path dubious but for the presence of guides.

Occasionally the sun broke through the mist, and a sense of drowsiness stealing over us, we took advantage of a grassy spot to dismount and let our horses crop the herbage, whilst we resigned ourselves to a comfortable nap, fanned by the mountain breeze.

'When we got back at 3 P.M. we found that the remainder of the party had gone down to the ship, taking the young ladies of the house with them; and we met them returning on our way down. They were delighted with their visit to the ship, not having seen a vessel of such magnitude before, besides an opportunity of seeing and hearing the effect of our big guns, for that day we were practising with shot and shell. We halted to say good-bye, when mutual expressions of regret passed between us, for we felt nothing could have exceeded the hospitality and kindness shown by Captain and Mrs. McKee and their charming daughters. With three cheers we then rode down the hill and embarked for the ship. It was with a sad thought of the unlikelihood of meeting again that we saw the lofty hills of Maui recede in the distance and found ourselves on our way to San Francisco that evening.'

## CHAPTER X.

THE PASSAGE FROM THE SANDWICH ISLANDS TO SAN FRANCISCO—AMUSE-MENTS ON BOARD—ARRIVE AT SAN FRANCISCO—EVENTS IN EUROPE— A TRIP TO THE YO-SEMITE VALLEY AND MARIPOSA GROVE OF BIG TREES—LEAVE SAN FRANCISCO AND ARRIVE AT VANCOUVER ISLAND.

THE passage from Maui to San Francisco was characterised by a more than usual degree of tediousness and disappointment, even to us who ought to have been by this time well schooled in adversity. Leaving on May 9, no sooner had we fairly got clear of the land than the wind failed us in the most unexpected manner, and after being at sea four days had not made more than three hundred miles. At this early period of the passage we could not afford coal, having but a small quantum of that valuable commodity on board, so this slow rate continued till the 20th; occasionally a light breeze coming enabled us to average between forty and fifty miles a day, and so creep towards our destination. But on the 20th we at last picked up the missing trade, and for a few days new life was instilled into us. On the 24th, however, the wind shifted to the northward, and the weather became very cold. For three or four days we were at the mercy of a foul wind, making but little progress, so that after being twenty-three days at sea we were not more than halfway, though the worst part was over, being now well

in north latitude. But we had yet to undergo several days of unfavourable and changeable weather before we picked up a westerly wind, which brought us in sight of the Farallones on the evening of June 4. Approaching the land we were soon enveloped in a thick fog, and obliged to anchor outside till it cleared off. It continued till eleven the following forenoon, when the sun and breeze dispersed the fog, showing us to be just outside the harbour. Steam was at once got up, and we went in through the Golden Gate, anchoring in our old spot. Before this our salute echoing through the town gave information that the 'Zealous' had arrived. The only important news awaiting us was the conclusion of the civil war in Paris, with the end as we had foreseen. After a bombardment of about two months the Government troops entered Paris, having to fight, bit by bit and street by street, against the Communists, who fought like wild cats behind the barricades; then, finding there was no hope for them, commenced setting fire to the capital in several places, causing considerable damage to the Tuileries, Hôtel de Ville, and other fine buildings before it could be extinguished. Exasperated at this, the Government troops shot down everyone they met, even women, many of whom had been discovered throwing petroleum and other combustible matter into the houses. Such a tragedy has few parallels in history.

During our present stay at San Francisco, as this was the most favourable time of the year, two of the

officers determined to take a trip to the far-famed Yo-Semite Valley and mammoth trees of California, both being justly ranked amongst the wonders of the world; the first on account of its unrivalled scenery, the second on account of their exceeding in size any other known trees, either in the Old or New World. Though our stay in port was limited to a fortnight, such an opportunity would not probably occur again in the commission, so the plan was put into execution, and the following account of the trip is from the pen of one of them:—

'My travelling companion and I, having fixed on June 19 to start for the big trees and Yo-Semite Valley, collected what information we could as to the most eligible route to and fro, bearing in mind our limited time. There are three routes to the valley, one viâ Mariposa and the Mariposa grove of big trees, another by Coulterville, and the third viâ Copperopolis and the Calaveras grove. After due consideration we determined to go by the Mariposa Valley and return by Coulterville, this embracing with the greatest ease a sight of one group of the giant trees.

'The Yo-Semite Valley lies nearly due east, about 150 miles as the crow flies, from San Francisco (by the route 230), in the lap of the Merced group of the great Sierra Nevada range of mountains; and the Merced river first becomes a stream of any size in its bosom, taking its rise higher up in the mountains. The valley was first discovered in 1851 by Major Savage, United States army, when in pursuit of some predatory In-

dians, but only within the last few years has it been accessible except to a few hardy pioneers. Now the difficulties are easily overcome, and each year renders the facilities of travel greater.

'Having obtained through tickets at San Francisco, on the day appointed we crossed to Oaklands on the opposite side of the bay, and from thence proceeded by train to Lathrop, eighty-seven miles on the Pacific line, whence we branched off to Modesta, twenty miles farther on, where we got good accommodation in a newly-built hotel. The railway, on leaving Oaklands, takes a south-easterly direction for some distance along the bay, then, turning to the north-east, passes through a low coast range of wooded hills and across a fine, rich, wheat-producing plain, now, however, completely burnt up by two successive years of drought. Near Lathrop we crossed the San Joaquin River, which in time will be utilised to irrigate the valley which bears its name.

'On the following morning, after a four o'clock breakfast, we started in a lumbering coach drawn by eight horses, crammed inside and out. I, being wedged in between two big, broad-shouldered men, was nearly smothered; whilst my companion having, with the British sailor's proverbial gallantry, given up his outer seat to a lady, was rewarded by her sweetest smiles and the perfect confidence she soon displayed in resting her wearied head on his shoulder; of which service and his agreeable conversation she will ever retain a lively and grateful remembrance. Subsequently a change of places gave me the pressure of a fair but

bulky form; but, alas! I was not rewarded, like my friend, with a public acknowledgement of the comforts that form experienced.

'A heavy shower of rain during the night (unusual at this season) had cooled the air and laid the dust, so that beyond being crammed and jolted over an execrable track we did not experience much inconvenience. All the plain lying between the low coast range and the foot of the mountains is a rich soil, and where it receives a due proportion of rain produces heavy grain crops; but no dependence can be placed on the seasons, and experience begins to teach the farmers that a system of irrigation alone can ensure crops. This can be easily effected; in fact, an English gentleman who has had great experience in India has undertaken the operation on a grand scale.

'Having lunched at the village of Hornitas, after a drive of about fifty miles, we travelled over a picturesque country to Bear Valley, where we had to mourn the loss of three out of five of our fair fellow-travellers, who on the coach waved a tender adieu. In the Bear Valley district several gold mines are being worked, and the bears, from which it derives its name, are nearly extirpated. Mariposa, which we reached at 6 p.m., is the capital of the county, and situated in a pretty valley, with a stream running along the foot of the hills. A quartz-crushing mill was erected here on a large scale by a company, but the capital having been 'played out,' the mill has come to a standstill. The region, however, is rich

in gold, and the bases of the hills are literally honeycombed by the gold-washing huts, but only a few Chinamen now remain of the mining host. The surface has been well washed, but hydraulic power, when water is plentiful, might doubtless still be used with success. A vein of gold quartz also traverses the district.

'From Mariposa we wound our way upwards through a wooded country, and arrived about nine o'clock at our night quarters, "White and Hatch's," a pleasant, clean house standing at an elevation of 3,000 feet above the level of the sea, where we found the air pure, keen, and appetising, which enabled us to do ample justice to the really excellent repast furnished. As regards the good fare the same may be remarked of the various inns established along the route to the Yo-Semite Valley. The keepers are generally intelligent, well informed, and industrious, apparently superior in most respects to the same class in the old country.

'Wednesday, 21st.—After an early breakfast we again started by coach, our route lying entirely through a forest of magnificent pines and cedars, interspersed with evergreen oaks and flowering shrubs. The ground was perfectly enamelled with wild flowers, some of them very beautiful, especially the snow plant, which resembles a double hyacinth, but is of a deep red colour and gives forth no fragrance. It grows at high altitudes, nourished amidst the frosts and snows of winter.

'We crossed the Chowilla Mountain at an elevation of 7,000 feet, and then descended by an easy grade to

Clark's Rancho, which we reached at eleven. rancho is situated in a narrow valley, through which runs the south fork of the Merced, and is the largest establishment on the route. We found the quarters most comfortable and fare abundant. Mr. Clark is one of the oldest pioneers—a fine specimen of the class—and discoverer of the Mariposa grove of big trees. The drivers of the coaches ought also to be mentioned as a singularly fine race of men, possessed of great shrewdness and intelligence, inured to hard work, and formerly exposed to constant danger from the Indians. We found them civil, obliging, and communicative: one amused us exceedingly by his description of a Scotch naturalist with whom he had roamed through the forests collecting butterflies and insects. The fancy pleased him mightily, and he shouted with merriment at the idea of this strange employment. Mariposa (meaning butterfly in Spanish) derived its name from these beautiful insects, which abound and are of brilliant hues.

'By the time we had reached Clark's we had become pretty well acquainted with our fellow-travellers, and found some of them very agreeable. One, a Mr. B——, a preacher of note in Sacramento, was making the trip with two lady connections. He had travelled over Europe, the Holy Land, and other parts of the globe, so that we found many subjects of mutual interest, besides being both enthusiastic admirers of fine scenery; and as their plans suited ours, we arranged to proceed together. So after lunch we all set out on horseback

for the Mammoth Trees. Our guide was young, but intelligent and active; constantly on the watch to "hinch" up the girths when getting slack, to prevent a catastrophe. Our trail lay first along the valley, partly enclosed as farm land attached to the rancho; then we scrambled up a steep and rugged path to the height of 1,200 feet, occasionally getting glimpses of deep-wooded hollows, overhung by rocky cliffs. What a glorious forest we rode through !--composed of yellow, sugar, and Douglas pine, and great cedars; many of the former 10 to 12 feet in diameter, 300 in height, and without a branch for 200. Such a ride alone compensated one for the trip. But behold before us in a swampy hollow a prostrate giant in expiring gasp, after having dwelt in the solitude of the forest for upwards of 2,000 years. Before the Star of Bethlehem had risen in the East; before great Cæsar died; before Old England was discovered by the ancients, thou didst spread abroad thy branches! thoughts filled my imagination almost to the exclusion of astonishment at the gigantic proportions of the tree. By rough steps we mounted the trunk, and stood nearly 30 feet from the ground: other great trees were near, but we had to move on some distance before arriving at the grizzly giant; a hoary monster, nearly 100 feet in circumference—albeit fire had passed over it, and burnt away a portion of its girth —whilst its first branch is 150 to 180 feet from the ground, and eight in diameter. I rode round it, gazing in admiration and astonishment; its top had either decayed by age or been blown off by the wind, but its height still is about 300 feet. Some of the most perfect trees have attained even to a height of 400 feet and upwards.



TWIN GIANTS, MARIPOSA GROVE.

'We now wandered from tree to tree, lost in amazement. I thought, Why has nature here produced trees so far exceeding in size any hitherto known in the Old or New World? The grove consists of about six hundred trees, more than one over 100 feet in circumference. They are a species of cedar named by an Englishman Wellingtonia gigantea, the botanical name being Sequoia gigantea (sempervirens) of the genus Taxodium. The largest trees have been named

by travellers; such as The Grizzly Giant, Fallen Monarch, Forest Queen, Aged Couple, Satan's Spear, &c.—

To equal which the tallest pine Hewn on Norwegian hills, to be the mast Of some great ammiral, were but a wand.

'Three of us were able to ride abreast through one hollow charred trunk; and we saw a trunk which indicated a tree had existed 120 feet in circumference. Unfortunately most of the largest trees have been touched by fire, the ruthless work of the Indians. Several groups of Sequoia have been discovered; but this is the most numerous, although the Calaveras grove lays claim to a larger tree than any I have mentioned. Their age has been computed at from 2,500 to 3,000 years, but it is almost impossible even to arrive at an approximation. It has been calculated that the trunk alone of one of the largest could be cut into paling eight feet long and four inches square to enclose 2,200 acres of ground. It was only when the guide warned us that night would overtake us in the depths of the forest that we reluctantly quitted a scene fraught with such interest; and, remounting, rode towards our place of rest in the waning light, more than ever impressed with the grandeur of these forests. Such scenes tend to elevate the mind and turn it to the great Creator of the Universe, whose hand has fashioned with equal care and wisdom the tiny blade of grass and these giant trees of the forest. By eight o'clock we got back to the rancho, where an excellent dinner awaited us;

after which we retired to enjoy such a sleep as a long day in the pure and bracing air must always ensure.

'Thursday, 22nd.—Up betimes and got off by seven on horseback (our stage travelling ending here), accompanied by our friends of the previous day. After crossing the south fork of the Merced—a clear and rapid stream—we wound our way along the side of a precipitous hill overlooking a deep valley, and, after crossing a bottom with open glades, made a great ascent through the same character of pine forest; now and then catching glimpses of the distant mountains. At 11.30 we arrived at Peregoy rancho, situated on the edge of a swampy plain, having gone about fourteen miles. This rancho was formerly a cattle ranch, but has lately been fitted up for the accommodation of tourists wishing to get the first view of the valley from the Sentinel Dome and Glacier Point; our object also. When preparing to start for these points, after the midday meal, portentous clouds began to gather over the mountains, and soon a peal of thunder warned us the storm was at hand. It quickly burst upon us with great violence. The rain descended in torrents, the lightning flashed, and the thunder made the earth tremble as it reverberated from peak to peak. storm amongst the mountains is always grand, but by four it had subsided.

'The wind died away like a sleeping child's breath,
The pavilion of clouds was unfurled,
And the sun, like a spirit triumphant o'er death,
Smiled out on this beautiful world.

'The day being now far gone, the ladies thought a ride of fourteen miles before dark too much for them, so they determined to postpone their first glimpse of the valley until the following morning. My friend and I, having but scant time, started with our guide. An hour and a half's ride, first over swampy plains and then through the forest, brought us to the Sentinel Dome, 4,500 feet above the valley, which burst upon us in all its sublimity and grandeur. The clouds had rolled off after the storm, and thin vapour crept up the sides of the mountains in fleecy clouds, which lingered for a while, but disappeared before the sun's rays. Far away to the east and south-east rose snowcapped peaks of the Sierra Nevadas, some of them 13,000 to 14,000 feet above the level of the sea. To the south Mount Star King; to the west and north-west densely wooded hills cleft in two by a tremendous gorge, through which runs the Merced. Far, far beneath slept in peaceful beauty the Yo-Semite Valley, hemmed in on every side by giant cliffs, its streams like silver threads, its tall trees dwarfed to the size of shrubs, and its orchards looking like cabbage gardens. At the upper end a lake shone like a polished mirror; almost in front of us the South Dome, "Tis-sa-ack" (goddess of the valley) reared its mighty head 5,000 feet perpendicular; on the north side of the valley, El Capitan, "Tu-tock-ahnu-lak" (great chief of the valley), 3,300 feet, beetling over the gorge, frowned in majesty; and adjoining it the Three Brothers, "Pom-pom-pa-sus" (mountains playing at leap-frog), resting one upon the other, ponderous and grand, facing the Three Graces of softer beauty. The North Dome, "To-cay-oe" (shade to baby cradle basket), 3,725 feet, supported by Washington Tower, "Hunto" (watching eye), 2,200 feet, hang over the Mirror Lake. Magnificent waterfalls at various points poured over the wave-worn cliffs in sheets of dazzling foam. We could hear distinctly the roar of the Nevada Fall as the Merced threw itself with one wild bound 700 feet into the gorge below, flashing and glistening in the rays of the setting sun. At another point the Yo-Semite Fall precipitates itself 1,600 feet on to a broad ledge projecting from the cliff; again it takes a leap of 600; and finally, by a third bound of 434 feet, reaches the valley, there to be lost in the waters of the Merced. Other streams, now full from the recent storm, fell from the dizzy heights in snowy sheets into the valley. The whole conjured up some fairy scene as memory recalled many a tale of childhood where imprisoned princesses and huge giants had their dwelling in some such impenetrable spot; and imagination found a parallel here in these Titan rocks and sylvan beauty below.

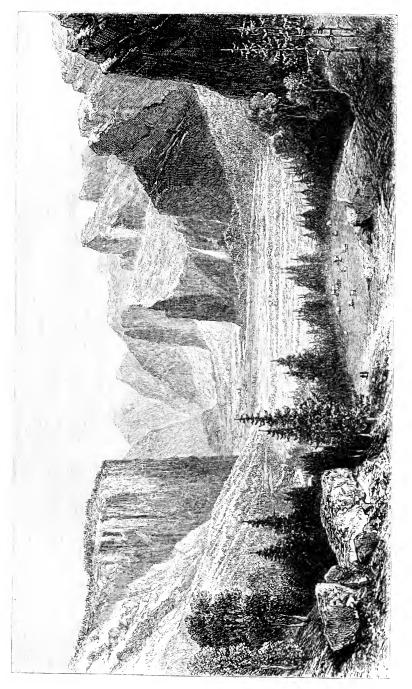
'From the bald head of the Sentinel Dome we descended obliquely 1,000 feet to Glacier Point, where, from an overhanging rock, we looked down sheer into the valley 3,700 feet. Being nearer the South Dome it looked still grander, and we had also a finer view of the Nevada and Vernal Falls, with the foaming cataract below.

'The sun had dipped behind the mountains, and the valley was beginning to be steeped in gloom, ere we turned away from the fascinating scene to wend our way through the darkening forest to our night quarters. Filled with thoughts on the sublimity and grandeur of the scene we had left we rode on slowly and in silence, until suddenly aroused from our reverie by finding ourselves on the brink of a roaring torrent, which we had passed but four hours before a limpid stream. Our guide hesitated to cross; but on the one side was the prospect of a cold and dreary bivouac; on the other shelter, warmth, and fuel; so, divested of his upper garment, and examining well the girths of the horses, he plunged boldly in. We followed, and all reached the opposite bank in safety, although at one time my horse lost his footing, and visions of being hurled down by the impetuous flood rose before mehappily not realised. How thankful I felt the ladies had not accompanied us, as they dared not have attempted to cross till the flood should subside! was quite dark ere we reached our cosy quarters, where a cheerful wood fire welcomed us, also a good dinner; and the evening passed most agreeably in the society of our companions.

'Friday, 23rd.—Again making an early rise we set off for the valley, whilst the others went to the points of attraction we had visited the previous evening. After a five-mile ride through the same magnificent forest, with swampy bottoms at intervals, we arrived at the edge of the deep gorge through which the Merced

flows; and, having tied up our horses, scrambled to a projecting point commanding a glorious view of the whole length of the valley, being elevated about 3,000 feet above it. The river, full from the recent rains, was pouring its floods along-sometimes a torrent of angry foam; anon placid, tranquil, and mirror-like. On each side rose giant walls of rock, over which fell several waterfalls of exquisite beauty. How bold and grand El Capitan looked—the guardian of the pass! How soft and graceful the wooded heights of the Three Graces; and how mighty the South Dome, towering above all his compeers! The valley is about eight miles long, with a width of from half a mile to a mile. It is almost a dead level, and seems to have been formed by a sudden subsidence of the earth, as characteristics attending either the glacier formation, or having been cut out by water, are wanting. elevation is 4,000 feet above the level of the sea.

'After contemplating for some time the exquisite view from Inspiration Point, we commenced the descent by a steep and rugged trail, and after an hour and a half of floundering progress reached the valley, where the trail improved as we rode along under the shade of lofty pines and spreading oaks; at one time by the edge of the tumbling river; at another by the base of stupendous cliffs. By-and-by we approached the Bridal Veil Fall, called by the Indians "Po-ho-no"—meaning, spirit of the evil wind—and held by them in superstitious awe. Diverging slightly we got close to it. A perfect cloud of spray enveloped us at times;





but, as the wind drove it aside, we had a fine view of the fall amidst the roar of waters. It is 900 feet in height, and, soon after taking its wild leap over the precipice, it seemed to lose its solidarity, and to separate into rockets, in turn to burst into sheets of dazzling spray. Passing on we had the Three Graces and Cathedral Spires on the one side, and El Capitan and Three Brothers on the other; all upwards of 3,000 feet in height, and almost perpendicular.

'There are three good hotels in the valley, and it was our intention to have gone to the oldest established, "Hutchings's;" but our fellow-travellers had persuaded us to put up at Liedig's, the first on entering the valley, where the fare is good, and apartments clean. Immediately behind the hotel the Sentinel Rock rises needleshaped 3,043 feet; and nearly opposite, the Yo-Semite Fall takes its huge leap. I never wearied gazing on it, and watching the eddying wind bending into wavy lines the snowy veil.

'Having lunched, obtained fresh horses and a guide, we started for the Nevada Fall. Riding up the valley for some distance we passed Blake's and Hutchings's hotels; a large drinking saloon recently erected, with baths—hot, cold, and Turkish—attached; also a laundry, dry goods store, and photographic establishment; then following the upward course of the Merced, which takes a sharp turn to the southward, we passed near the base of the Sentinel Dome, and close under Glacier Point. Crossing the entrance of the South Cañon we caught sight of the South Fort

Waterfall, but did not approach it, the way being blocked by large boulders cast down from the crags above: at times the valley is literally shaken by the shock of falling cliffs, rent off in winter by the swelling ice, or loosened by the floods. Continuing along the course of the river-now a foaming cataract-we wound our way up a giddy path with frequently not a foot between us and the deep abyss. Occasionally we stopped to look back on the glories which different points revealed; then, crossing the shoulder of a large buttress, we came in view of the Nevada Fall, and, descending, crossed the torrent by a wooden bridge, and rode to a house of refreshment not long built on a rocky plateau, a short distance from the fall, and close under the Cap of Liberty, a cone rising 2,000 feet above the falls, and 4,000 above the plain. Here we fell in with General S- and a large party, including several ladies, who were making the same tour as ourselves, and just about to start for Clouds Rest, a peak of the Sierra Nevada, where they wished us to accompany them; but time would not permit, so we separated.

'Leaving our horses, and again crossing the stream by a narrow foot-bridge, we got near to the fall, which, although not the highest, is certainly the finest in the valley, as the main body of the Merced descends at one bound 700 feet. The sun shining on the glittering spray produced one of the most perfect and brilliant rainbows I have ever witnessed, and, being low, appeared to envelope us. Having gazed at the magnifi-

cent spectacle above and below for a short time, we returned to the house, mounted, and recrossed the bridge; then giving our horses to the guide, with directions to meet us at a point lower down, descended by a series of ladders to the foot of the fall, which is 350 feet high, named by the Indians "Pi-wy-ack," or Cataract of Diamonds—which well describes its beauty. At this point a sad accident occurred the previous week: a tourist fell from the ladder and was killed on the spot. Clouds of spray blown across our path rendered it exceedingly slippery; so that care had to be taken, as a false step might have been fatal, the foaming torrent being beneath. Rejoining our guide, we hastened homewards, stopping at the baths and saloon, where we refreshed the inner and outer man.

'Saturday, 24th.—Off at daylight to see the reflections in the mirror lake before its surface was ruffled by the breeze. The lake lies near the head of the valley, between the South Dome on the one side and the North Dome and Washington Tower on the other. It is a small piece of water deeply fringed with trees. Not a ripple disturbed its surface, and each peak, ridge, tree, crag, and shade was so faithfully reflected that it was difficult to discover where substance ended and shadow began. The blending was exquisite: shortly the sun began to gild the mountain peaks and rugged crags, whose outline in the water looked like burnished gold. A musical echo was heard here, prolonged for some seconds, and dying away in a most melodious cadence.

'A very small part of the valley is cultivated, the greater portion being covered with brushwood or large trees, pines, evergreen oak, maple, &c. In some places it has quite a park-like appearance; there are also many beautiful shrubs and flowers—the white azalea, with its faint aromatic perfume, scented the morning air—and many others of varied hues.

'Sunday, 25th.—Breakfasting early, and saying adieu to our pleasant fellow travellers, we started on our return journey by the Coulterville route, young Coulter, son of the old pioneer, being our guide. Passing down the valley for about a mile, we crossed to the north side of the Merced, continuing along its banks close by the base of El Capitan, and then took a very steep trail up the mountain side through the woods. Having gained the ridge, I took a last fond lingering look of the valley, and can say almost in the words of a great traveller:—

"I never left a place with such pleasurable regret. I have travelled almost the world over, have seen some of its finest scenery, but have never seen so much of sublime grandeur, relieved by so much beauty, as that which I have witnessed in the Yosemite Valley."

'After a ride of about sixteen miles, we overtook the party of General S——, also homeward bound; and a short distance further on our equestrian travel ended. Here we lunched, and, having got a rattletrap and pair of screws, drove ourselves the greater part of the way to Coulterville. The drive was beautiful along the mountain side, as at times we had magnificent views

over the valley of the Merced, and far away to the plains.

'At 6 we reached Coulterville, having brought the same pair of horses 30 miles, which distance they had previously done early in the morning. They were curious specimens of the genus "screw," but did their work well. One had a peculiarity of going round the corners on three legs, with the fourth stuck obliquely and rigidly out, which rendered some of the critical turnings a trifle unpleasant.

' Monday, 26th.-We got away by the stage coach at half-past six, and had one of the hottest, dustiest, and most jolty rides I ever experienced, arriving at Modesta at 4 P.M., where we were not sorry to exchange our uneasy vehicle for the smooth-running train. At Lathrop we were detained some hours, not getting away until 1 A.M.; we, however, arrived at San Francisco in time for a nine o'clock breakfast on the 27th, having had a most enjoyable trip. But as much depends in a great measure upon the companion of your travels, I must say I was fortunate in mine, and the pleasure was largely increased by that companionship, where discomfort could not ruffle, or difficulty daunt: only once did I hear him give vent to anything like wrathful feelings, when being, as he muttered to himself, "smothered in a bunk" in the railway car. Add to these qualities a fellow admiration for lovely scenery, and it makes a trip to Yo-Semite Valley well worth executing.

'Although little more than a fortnight at San Fran-

cisco this time, we were enabled to keep up our ancient régime of Thursday afternoons on two occasions, when the number of people who came off showed they were not yet weary of these entertainments, and many were the expressions of regret which we heard at our early departure. They were mutual, and only mitigated by the feeling that before many months we should meet Thus, on June 30, we once more bent our steps towards the north, where our cruise will be concluded, and a little shooting and fishing is looked forward to as an agreeable change after the arduous nature of the past year's employment. We steamed up the coast without hindrance till July 2, when a northerly breeze springing up obliged us to stop steaming, and stretch out from the land under sail. wind continued to blow with increasing strength, taking us daily away from our port instead of towards it, till the 11th, when it subsided, and with steam we were enabled to make headway towards our destination, having by this time run well to the westward. next morning we picked up the westerly wind that was required to take us in before July 20, that being the day fixed for the annexation of British Columbia to the Dominion of Canada: no doubt to be celebrated by some public demonstration, in which we ought to take a part.

'The usual amusements which assist us to pass the time on these lengthened cruises that it has been our fate to sustain had not been forgotten, and a most appropriate lecture on "War" was delivered by our talented shipmate F-, when the oft-repeated saying "Si vis pacem para bellum" found in none a denial of its efficacy. The following week a variation was tried by substituting readings in lieu of a lecture; and, two or three of the officers having volunteered their services, the way in which the trial from "Pickwick," "Artemus Ward," and other selections were received fully demonstrated the popularity which always attends these The next week the "Free and Easy" entertainments. gave a performance, when a new addition, in the shape of an Irishman, with the richest of brogues and most comical of faces, kept the audience in a roar of laughter. So time sped on, till alternate changes of favourable weather brought us on the evening of the 18th up to Cape Flattery, and we steamed through the Straits of Fuca against a strong tide, arriving in Esquimalt Harbour on the morning of July 19, where we found the "Fawn" just out from England, besides our old friends the "Boxer" and "Sparrowhawk."

'Thus comes to an end our cruise. It is a few days over a year since we left Vancouver Island, and in the interval we have gone over many miles of ocean and visited many places. The time has passed quickly, though not always agreeably; for that would be an impossibility, taking into consideration the conditions under which we serve. A rest, however, will prove beneficial to all, and then, let us hope, when we again go forth it may be to visit fresh scenes, and bind all yet more firmly in mutual enjoyment and friendship.'

## CHAPTER XI.

CONFEDERATION OF BRITISH COLUMBIA WITH THE DOMINION OF CANADA
—THE RELATIONS BETWEEN ENGLAND AND THE DOMINION—DEFENCELESS STATE OF BRITISH COLUMBIA—AMATEUR PERFORMANCE ON BOARD
—THE SHOOTING IN VANCOUVER ISLAND—DEER HUNTING—ACCOUNT
OF A WEEK'S CAMPING OUT—FISHING IN VANCOUVER ISLAND—PERFORMANCE AT THE VICTORIA THEATRE—BALL AT GOVERNMENT HOUSE
—FAREWELL BALL TO THE ADMIRAL—LEAVE VANCOUVER ISLAND.

On July 20, 1871, the day following our arrival in Esquimalt Harbour, British Columbia, which includes Vancouver Island, was admitted into, and confederated with, the Dominion of Canada. By this act is forged another link in the chain that shall hold together all those vast possessions in the Northern continent. consolidation there is wisdom, because with that eagerness for self-government shown by our colonies must come the conviction that the mother country, when debarred from much voice in their governance, cannot retain the same relations as in time past. bound to protect her colonies when in the struggles of infancy, there is a time, as in human life, when, although rebelling against home government, they are not and cannot be for some time strong enough to protect themselves. It is this which has made the task of the English Government, in dealing with our colonies, one of great difficulty for some years. We see many things demanded as a right, and our interference resented;

while at the same time the least act in recognising the ability of a colony to take care of itself is immediately reprobated as deserting our children.

It is difficult for ordinary mortals to comprehend or define the exact relations in which the Dominion of Canada stands towards England at the present time. It apparently is equally difficult for the presiding genius at the Colonial Department to enlighten them, or state the policy determined on in the case of any eventuality. In withdrawing all our troops we imply either that we recognise their ability to defend themselves, or our own inability to assist them. To enter into the correctness of one or both these assumptions is not my present purpose, though it would not be difficult, I think, to show that the first is as absurd—where a population of four millions is opposed to forty—as the second; for what sane man would deny the valuable auxiliary that 5,000 English regulars even would be to the Canadian militia at the first outset in keeping the invaders in check till reinforcements were procured. It is difficult also, seeing that we do not throw up the idea of maintaining the integrity of the Dominion, to understand how that object is better attained by withdrawing our troops to a distance than keeping them in the country; independent of other reasons against it, one of which is forcibly given by a great writer in an essay on the spirit of Conservatism. He says, 'A state must, for durability, conserve its special national character; and the national character of England will be lost whenever it shall see with apathy large standing armies within its own shores. One of the obvious advantages of military colonies is the facility they afford for maintaining therein such military strength as may be necessary for the protection of the empire, without quartering large bodies of troops in England, to the danger of freedom; and therefore it is a very shallow view of imperial policy to ascribe solely to our colonial wants the military forces kept in colonies, and exclaim, "See what those colonies cost us!" If we had no troops in colonies, we must either be without adequate military force, or we must obtain such adequate military force at the risk of freedom, by collecting and converging it into garrisons at home.' Those remarks are peculiarly applicable to the present time, and must commend themselves to men of every shade of political thinking.

But it is to British Columbia that I would call attention. At this moment the relations between Great Britain and America are more amicable than they have been for many years—all differences about to be removed, and a glorious future of brotherly love predicted. Under these circumstances one need not be called an alarmist, or accused of trying to damp a sentimental enthusiasm, in pointing out that little occurrence of July 1871, when Earl Granville succeeded Lord Clarendon at the Foreign Office, and was told by one of his subordinates that never, in his recollection, had the political state of Europe been so quiet. Nevertheless, France declared war against Prussia, and the incident remains as a warning that

under no imaginative state should these matters be viewed, for we know not what a day may bring forth, and should be prepared for any eventuality. Supposing, then, a war to break out between Great Britain and America, what would be the position of British Columbia? Simply its occupation and annexation by America; a long-cherished dream, which saw part of its fulfilment in the purchase of Alaska, and is further shown in their persistent efforts to attain San Juan.

War at any time within ten years would mean the absorption of that portion of the Dominion, for it is isolated and unprotected. Isolated, for there is no communication with the East, except through America; therefore Canada could not assist them, and the navy of the latter is as yet unconstructed. Unprotected, for it has no defences of its own—not a single fortification or gun mounted; a meagre population, which does not even boast a militia.

It would be to England, therefore, they would look for protection; and how could we do anything with the small force we have in the Pacific, and that scattered far and wide? On the spot a corvette and gunboat only available to resist any force sent up from San Francisco—a port four days distant—or troops poured across the Straits from Washington territory. It is not pleasant to contemplate such a result; neither to the inhabitants themselves, to whom something is due, or to the mother-country, where so much moral prestige is concerned. But for that reason the subject should not be shrunk from, neither remain with false

notions of security, which a process of drifting has brought us to.

Under the terms of Confederation, Canada pledges herself to build a railway across to the Pacific in ten years: then communication being effected, there is every prospect of the Dominion becoming a most powerful and prosperous State. It is this interregnum which must be fraught with anxiety to both them and us. that can be tided over, their unity is assured; but, looking at the situation of this country, the struggling nature of its existence, and the barrenness of its population, it does almost seem short-sighted policy entering the Dominion till the countries are connected and could mutually assist each other. It may be said that Confederation will make that progress more rapidly, as undoubtedly it will, but it places both in a peculiar position till attained, and deciding at once against Imperial Government must also weaken the interest England feels in a colony which, from its circumstances, had such a strong claim to protection and assistance.

But the act is consummated, and a Lieutenant-Governor has been appointed by the Dominion in the person of Mr. Trutch, long a resident in this country, and who possesses, in addition to knowledge of its resources and requirements, keen administrative ability, so that to no better hands could the inauguration of the new system have been entrusted. A week after our arrival, ex-governor Musgrave left for England,  $vi\hat{a}$  San Francisco, to which port he was conveyed by H.M.S. 'Sparrowhawk,' taking with him the good wishes of

all classes of the little community he has ruled over so long and so ably. May he soon find in another and more extended sphere that field for the exercise of those talents and social qualities which were conspicuous in British Columbia. Shortly before his departure he was present on board at a performance given by our talented amateurs, with a select party of ladies and gentlemen. The pieces were 'Slasher and Crasher' and 'Bombastes Furioso.' It is almost needless to say that the performance was most successful, and at its termination the band was placed on the stage, a dance being a fitting finale to the evening's amusement. Grouse shooting commenced on August 10, and for some time after in the woods could be heard continual popping of guns.

As all who come to the Pacific wish to know concerning the sport to be met with in Vancouver, and the general aspect of the country, a portion of this chapter shall be devoted to that subject, in continuation of what was said about the same during our first visit. It will serve to correct any little inaccuracies that may have then crept in, for our second visit gave us a much better opportunity of observing the habits &c. of all kinds of game, as it was during the shooting season; and we also visited lakes and streams not previously known or fished in by us.

The principal game birds found in Vancouver Island are grouse, although ducks of nearly every variety and a few kinds of geese visit the numerous lakes and swamps during the winter on their passage south.

Snipe are sometimes found, though very uncertain; also sand-hill cranes pass over in large flocks during the fall, but the latter are difficult shooting.

The grouse are of two kinds, blue and willow. Blue grouse are migratory birds, arriving in the island about the end of March, and during the spring are found chiefly in the hilly places, their whereabouts being discovered on a still day by a peculiar drumming noise made by the cock birds, which comes from the throat. This species is about the same size as the black game of Scotland, but the males are not so dark, while the females are darker than their European relations. The willow grouse, or, as it is more commonly called in America, the 'tree partridge,' is about the size of an English grouse, and is indigenous to Vancouver Island. Their flesh is darker than the blue grouse, and has a finer and more gamey flavour.

The shooting commences on August 10, and at that time both kinds are found in great numbers near the corn and stubble-fields, morning and evening. During the heat of the day the blue sleep and bask on rocks, while the willow take to the swamps. When disturbed these birds do not fly far, but settle in a tree, where five or six may be killed in succession without a single bird moving. In this way the Indians, who never waste a charge, kill them. About September the blue grouse go back to the open mountains to feed on berries, and this is the best sport, as they are chiefly found in the ferns, and then strong on the

wing. They leave the country about October, though stray birds are found much later.

After the corn-fields are picked clean the willow grouse go back to the thick woods to feed on crabapples, arbutus berries, &c. Then all true sport with them is over, as they keep to such thick places that a shot is seldom obtained except in a tree.

Black bears are numerous in the more distant forest, but great care and quiet hunting is necessary to get a shot. They are not dangerous, and easily killed. Black and grey wolves are very numerous, and do great damage to sheep-breeders. An animal called a panther is occasionally killed, but it is wrongly named, being probably the cougar of North America. It is very fierce if driven to bay, and also commits great havoc among flocks and herds, though pigs are his great fancy. They sometimes reach the length of ten feet from nose to tip of tail, and a reward of ten dollars is paid by the Colonial Government for the head of a wolf or panther.

Beavers, coons, mink, marten, &c. are also found all over the island. Deer-shooting commences on August 1, and frequent hunting excursions soon made it evident to us that deer are very numerous in Vancouver and adjoining islands. They are commonly called 'blacktail,' from the colour of their appendage, but are small, the general weight being from 110 to 140 lbs.; 180 lbs. was the heaviest buck we ever heard of. In spring, when the young grass is growing, they feed on

the sides of the small hills in open patches, the sweetest grass growing between the rocks. They commence at dawn of day, and after breakfast, if the morning is bright, frequently lie on the rocks basking in the sun. Later in the day they go into the dry, warm bottoms, and sleep till evening. If a farm is near they soon find out the young wheat or timothygrass, and a fence must be very high to keep them out. The farmers sometimes get into a tree towards evening, near where the deer are accustomed to enter the field, and so often get a shot.

As summer advances they go back to the mountainous districts, and after the continued hot weather has scorched up all the grass on the hill-sides, feed in the swamps, and spend the day in the deep valleys and thickets. At this time they are fond of standing in the pools of mountain streams, and even lying down in the shallow water. Late in autumn and towards winter the cold and snow drives them down, and they are then found close to farms and settlements, sometimes seen feeding with the cattle. In hunting deer with dogs, as is often done, the former frequently take to the water if any lake is near. It is a curious fact that a deer shot in the water from September to end of March floats, while during the rest of the year it sinks directly you have fired. Why, we never could discover; but it is, however, perfectly true. The best and most sportsmanlike way, however, of killing deer is 'still hunting,' though it is rather lonely work, for the hunter ought to be alone, and cannot go too

quietly. In tolerably open country a rifle is best, but if thick, rough ground, a smooth bore, buck-shot in one barrel and a ball in the other. If there has been a slight fall of snow, the hunter can follow the fresh tracks, and thus get a shot; if no snow, then he must depend upon his knowledge of the country and skill in the craft, making up his mind for hard work, for he will often have to walk a long distance before being rewarded with a shot, and also always being prepared, as he will frequently 'jump' a deer in the ferns or scrub. These deer can generally be made to stand by giving a sharp whistle, and under this process I have known men fire as many as five shots at one deer, in the excitement unable to hit till the animal has eventually jumped over the rocks into the nearest thicket in perfect bodily health.

During our stay at Vancouver, a very favourite way of spending a week was camping out in the woods, living in the most simple way, and if a deer was brought back it was considered sufficient recompense for any little discomforts experienced. As most of these expeditions were similar to each other, the following account of a week's camping out will give a very good idea of the peculiar nature of Vancouver forests, and the enjoyment to be derived from one of these excursions.

It was on a Tuesday morning in the first week of August, consequently the hottest period of summer, that B. and I landed, bound on a camping-out expedition, the prosecution of which had been revolving in

our minds for some time, and was now about to be put into execution.

We started with very little provision; in fact, carrying everything considered necessary on our backs, for we intended that our guns should obtain our daily food, and shelter at night be obtained from a tent improvised on the spot selected.

Slight though were our requirements, we were, nevertheless, almost stifled by the heat and weight carried before half a mile had been traversed, though we had set out to walk twelve miles through the bush, swamps, and pine forests, that appear to have no ending, to a spot that neither had any knowledge of, except that it was somewhere in that direction; such was the exuberance of our spirits at getting rid for a time of routine and that life on board ship which, without relaxation, becomes so monotonous. But walking half a mile had a most miraculous effect in reducing this exultation to the opposite extreme, and we felt in a fix, besides nearly done up. But that self-same little cherub that sits up aloft and looks after poor Jack now came to our aid in the most pleasant and unexpected manner, for just then we chanced to meet a well-known friend and guide to naval officers when deerstalking, the son of a farmer in that quarter. He, seeing our circumstances, told us to wait where we were, then ran home, brought his horse, packed everything on it, and, constituting himself as guide, took us under his protection, and we started afresh, lighter in body and mind.

For the first four or five miles we jogged along by a beaten trail to the foot of Green Mountain, passing Thetis and Pike Lakes. A very steep climb up the side of this hill at length brought us to the summit. We here had a splendid view of the eastern part of the island, showing the city of Victoria, straits of Juan-de-Fuca, and island of San Juan; while down at the foot of the mountain we looked upon some of the lovely lakes which are dotted here and there all over Vancouver Island. Our way then led us down a very gradual descent over Glide Mountain, along the crest of a range of small hills till we arrived at Grasshopper Hill, which our guide told us overlooked our campingground. We here had to dispense with the use of our horse, the descent of the hill being too rough and steep for him. Indeed, it had been a wonder to us for some time how he had got along as he had, climbing up banks and stepping over places which required great care on our own part. Accordingly we unloaded him, and transferred the various articles to our backs, and, with a good look all round to get on different bearings of landmarks, descended to our proposed campingplace—one of the loveliest little spots I have ever seen, on the banks of a small lake, 200 yards long and 80 wide, fringed with water-lilies. Having selected a spot on the shelving bank with easy access to and from the lake, we dismissed our guide, first exacting a promise that he would make his appearance with the horse in eight days' time, then set to work to build a 'lean-to'

or rough kind of hut, also provide a repast for that evening and the next morning.

We constructed our rude dwelling after this wise. First cutting two poles about 5 feet high, we placed them in the ground 4 feet apart; across the top was another straight piece of spruce fir; then some half a dozen more spruce boughs, 7 feet long, were placed about 5 feet from the foot of the frame, leaning against the cross pole all on one side, with smaller boughs intertwined to fill up the space. When finished, we were delighted with the appearance of our 'lean-to,' and then proceeded in quest of supper, I taking a gun, while B., tying a casting-line to a piece of stick, went down to the lake for fish. In less than an hour we met again with a brace of grouse and three or four tolerably-sized trout. It being now late, a fire was at once lit close to our habitation. B., by virtue of his past experience, was constituted cook, and proved an adept, producing an excellent repast, to which, after the day's labour, both did ample justice. Afterwards we placed dry spruce-boughs inside to make a bed, laid out our blankets, lit our pipes, mixed a potation of hot grog, and then, having placed wood on the fire to make it last as far into the night as possible, lay down in our 'lean-to,' our heads inside, and our feet protruding about a foot outside, feeling at peace with all the world. But our slumbers were summarily disturbed a quarter of an hour afterwards by a loud bellowing, apparently on the other side of the lake. B.'s past experience suggested a panther or wolf, whilst

205

my idea was of deer calling to each other, and we argued the question till both fell asleep again, while the noise continued at intervals. At 4 A.M. we rose, and just before daylight started on our first excursion after deer. We soon separated, going different sides of the mountain, with an understanding to meet on the opposite; but somehow both missed the other, and did not meet at the camp until about eleven in the forenoon. B. had seen two or three deer, and said 'if he had had a rifle could have shot them.' Of course I had the rifle and had seen nothing, while he had the gun; mais, n'importe. After a breakfast of grouse and trout, with a short rest, we again started for deer and our daily food.

Thus we lived and repeated our routine day after day, each one distinguished from the other by various little exciting adventures; entirely by ourselves among these hills, everything in a wild state, no signs of human beings within several miles.

It was on the fourth day that we got a deer. B. and I had started early as usual, and separated, each going his own way; but it soon came on to rain; so, not being a very ardent sportsman, I returned to camp to keep blankets dry, &c. Three hours' rain sufficed to wet everything completely; then the fire went out, the breakfast spoilt, and no signs of B——; so I began to feel miserable. At last, however, I heard a 'cooing,' and shouted lustily in reply, but could not make out his whereabouts, for the hills all round echoed and mocked me every time I imagined I had found out the

right direction. I now began to feel anxious, for it was evident B-was calling for assistance, and might have shot himself or be otherwise dangerously hurt. I determined to go in what I believed to be the right direction, and fortunately picked out the correct one, for walking round the foot of Bald Mountain I came upon poor B——, lying on a bank completely exhausted, whilst by his side lay a fine doe which he would not abandon. His joy at seeing me knew no bounds. It appeared he had shot her more than a mile away, then tying the four feet together, had struggled on under this weight till he dropped where I found him. lieving him of the weight, we got back to camp and hung up the doe, which we afterwards found weighed 90 lbs. As our experience in deerstalking became great, so the number we saw increased: we did not, however, get another, though had several shots with the rifle. They are not so easy to hit as many think, even when brought to a standstill by a shrill whistle, which plan I always found had the desired effect, though but momentary. In trusting to our guns for food we once or twice had an empty larder for several hours, especially one day, when not a grouse was to be seen or a fish to bite, though we wandered about after the former all day, occasionally interrogating the latter, till late in the evening. Then we came upon a pack of grouse, close to the camp, which were kind enough to remain in the vicinity till we had shot two brace and a half. No birds were ever watched more keenly than these while undergoing the process of cooking. None

have I ever enjoyed with a keener relish. Sorry, indeed, were we when the eight days expired and our guide gave a view halloa from the top of Grasshopper Hill. It was only now, when called upon to bid adieu to our little hut and its surroundings, we felt how happy and pleasant it had all been camping in the silent, beautiful valley by the side of the little lake; the joys and hardships, the hungry days and convivial evenings, and the freedom from care, society and its ties, in this semi-savage kind of life. To those, however, who are careful in comfort, not wishing to rough it unless absolutely obliged, I should not recommend to attempt camping out in the forest. Neither B--- nor myself were troubled about those things, and we returned on board with our deer, vastly improved in health, and a friendship cemented by mutual assistance.

Now a few words concerning trout fishing. Nearly every lake in the country abounds with trout; some contain small, and a few, large ones. These trout are different in appearance from their British brethren, having no red spots, while the brown are very abundant, especially about the tail. These fish take a fly readily in the spring or autumn; a bright warm day is best, with a very light breeze. The rivers contain a larger species of trout; they are more graceful in shape than the lake fish, and when in condition are beautiful, their bellies white as snow and sides like a buttercup. They are very strong, and, as the rivers are rapid, give splendid sport. In the Comox and Campbell rivers  $2\frac{1}{2}$  lbs. is the general size, though they are caught up

to 5 or 6 lbs. Sea trout are also killed in the mouths of these rivers.

The best months for the rivers are May and early June; again from end of August to middle of October. In the warm summer they are full of snow water, the heat of the sun melting it on the mountains; at this time the trout will not rise. The flies for Vancouver Island should be large and gaudy; hooks, No. 4 or 5, Limerick bend; the bodies red, blue, yellow, black, green, or peacock, with wing of turkey, mallard, teal, or white goose feather. They should be dressed full, and ribbed with gold. For the rivers they should be much larger, No. 1 or 2 hook. In the Comox we found they took best a fly as large as a good grilse fly. White wings are always good.

The best lakes for trout nearest Esquimalt Harbour are Little Thetis, Long and Pike, one and a half to three miles from head of the harbour. Swan Lake, four miles distant, contains fine strong fish up to 2 lbs., with plenty of boats to fish out of; but this lake is uncertain. Early in May is the best season. Prospect and Beaver Lakes, nine and eight miles respectively, are good localities, especially the former, the trout in it large, bright, silvery fish, and best flavoured of any in the district. The best fly for this lake is called the Matthews fly. Two miles distant from Prospect, and one from Beaver Lake, there is a good inn kept by Stephens, who has boats on both. His wife is an excellent cook, and provides good suppers at a moderate rate. The best rivers are Cowitchin, Chemanos, Comox, and Campbell. The first three

can be reached by steamer from Victoria, the latter by canoe from Comox. Of the other rivers we know nothing, but no doubt they improve as you leave civilisation behind. For grouse-shooting, the mountains behind Metchoosen, near to the Gold Stream, are good localities, though they are found everywhere round Esquimalt Harbour. From Green Mountain along to Bald and Saanich Mountains are good resorts for deer; three or four can be found on any morning by a careful hunter. An old hunter, a Frenchman, resides on the bank of Prospect Lake in a log hut, and lives by hunting: he is an excellent guide for any one in search of sport. One word of advice, however, before leaving the subject—do not form an exaggerated idea of the shooting or fishing in Vancouver Island. Neither one nor the other can be obtained without hard work and occasional disappointments; but there is not the slightest doubt that in the hitherto unpenetrated region of the interior there is an abundance of all species of game, large and small.

Cricket at Vancouver this time was more successful than the previous year. The first match was the 'Sparrowhawk' and ourselves against the Victoria Club, played at Beacon Hill. Winning the toss, the V. C. went in first, but, mainly owing to the unerring bowling of Lieutenant B——, they were quickly disposed of for 17 runs. The Navy then went to the wickets, and made a capital innings of 108, of which B—— and R—— contributed 36 and 21 respectively. In the second innings of the V. C. a better stand was made, but they

could only obtain 63, leaving the Navy winners by one innings and 28 runs to spare. The return match was played on September 16, resulting in another victory for the Navy by 14 runs on the first innings, there not being time for the second. The only other match was at Colwood, Victoria and Esquimalt against the Fleet, in which the latter were beaten by one innings and 90 runs to spare. For some time the Amateur Dramatic Company had been preparing to give a performance at the Theatre Royal, Victoria, to assist the funds of the Mechanics' Institute, now at rather a low ebb; so on October 9 the performance came off, and the following account is given by the 'British Colonist':—

'The very full attendance at the Theatre Royal on Monday night was the most fitting mark of appreciation that could be extended to the gentlemen who tendered their valuable aid in behalf of an object so meritorious as the Mechanics' Institute. The audience was one of the largest and most fashionable that has assembled at the theatre for several years, and the performance, though not free from some of the faults that are inseparable from amateur entertainments, was exceedingly clever. The "Zealous" band played several overtures with good spirit and taste, and shortly after 8 o'clock Lieutenant S. Eardley-Wilmot came before the curtain and delivered the following happy and original

#### 'PROLOGUE.

'I wish with all my heart the stage and town Would both agree to cry all prologues down, That we, no more obliged to say or sing, Might drop this useless, necessary thing;

No more, with awkward strut before the curtain, Chant out some rhymes there's neither good nor hurt in. But lest, in thoughtless innocence of heart, You expect of us too much histrionic art, These few words I now feel called upon to say--Bear them well in mind all you I pray-Our troupe consists, no doubt as you're aware, Of men alone; we have no damsels fair To add a charm with pretty faces; Ours, alas! are very ancient graces, Unformed by nature to don the dimity, But making virtue of a dire necessity, Since past experience has taught to all mankind, A ship is better without the womankind. For the others their excuse must be, Dramatic art's not learnt upon the sea; And if good acting is not always seen, Remember, 'tis better to be a Nelson than a Kemble or a Kean.

We come here, then, in worthy cause, And ask your charity, if not applause. With candour, critics, to that cause attend; Let pity to our lighter errors bend— Forgive at least, but, if you can, commend.

'The prologue was received with prolonged applause, and the fine comedy of "Naval Engagements" commenced. All the parts were well sustained. Mr. Brimfield personated Admiral Kingston with becoming dignity. The character of Lieut. Kingston was taken by Lieut. Eardley-Wilmot, Short by Mr. Ommanney, Dennis by Mr. Corbet, Mrs. Pontifiex by Mr. Baring, Miss Mortimer by Mr. Allen. All played their parts remarkably well, and were much applauded. The burlesque of "The Babes in the Wood" was admirably put on. Lieut. Eardley-Wilmot's Sir Rowland Macassar was a fine representation of the remorseless uncle,

and he walked the stage with the self-possession of a veteran professional, besides being remarkably correct in his part. The make-up of Mr. Ommanney as Tommy, and Mr. Allen as Sally, was ludicrous in the Sally's ankles were much admired. ruffian business was done by Mr. Corbet and Mr. C. Elton. Mr. Mossom as Lady Macassar was as bloodthirsty as Lady Macbeth, and Mr. Baring as the Nursery Governess was energetic and graceful. The choruses were all well sustained, Mr. Elton accompanying upon the piano. When the curtain was rung down, the audience, screaming with merriment, demanded an encore of the last scene, and finally called Tommy and Sally out to admire the young lady's feet. "Timothy to the Rescue" is a laughable farce, and had been well cast. Mr. Timothy Spangle was taken by Mr. Corbet. This is a very difficult rôle, requiring frequent changes, but was rendered in an amusing and correct manner by the gentleman. Mrs. Incubus was done by Mr. C. Elton with a style and air that drew tears of laughter, and bouquets of (cauli) flowers from others. It was, indeed, a most laughable personation. Mr. Ommanney as Sampson Whiffles was remarkably amusing and lively, while the tout ensemble of Mr. Allen as Mrs. Whiffles was superb. Mr. Greet as Tompkins, and Mr. Davey as Hunx, were very good. When the curtain fell there were loud cheers, and as the audience filed out the band played the National Anthem. The entertainment will probably add a considerable sum to the depleted exchequer of the Mechanics' Institute.

After paying off all expenses, the sum of \$130 was handed over to the secretary of the Institute, who expressed himself as much surprised as gratified by the result; and at the next general meeting of the members a vote of thanks was passed to the officers for their kind efforts.

On the Prince of Wales's birthday, the Lieut.-Governor gave a ball at Government House, which was a great success. Only one little drawback existed, in the fact that the Bishop was going to hold a confirmation-class a few days after, and the candidates were nearly all ladies, who felt thus debarred from attending the ball. It would not, therefore, be quite correct to say that all the youth and beauty of the colony were there, and difficult to say who felt the deprivation most. Notwithstanding, the supply was equal to the demand, and no lack of partners existed. A most sumptuous supper heightened the gaiety; while our band, with a creditable abstinence till the end, preserved the regularity of their time and reputation earned in many a like proceeding. The ball was kept up with great spirit till 5 A.M., and the loud expressions of pleasure from all were a slight acknowledgment to the Governor and his wife for their unremitting exertions to make everybody feel at home and enjoy themselves.

Our stay at Vancouver Island was now drawing to a close. The four months spent there had passed very pleasantly. The ship had been refitted, and the health of the men materially improved. But the weather had become cold and wet, with occasional gales of wind, so we felt it incumbent upon us to make a start ere it should get worse. The citizens of Victoria gave a farewell ball to the Admiral on November 28, and on the 30th, bidding adieu to Vancouver Island for the last time, we steamed out of Esquimalt Harbour, casting many a wistful look behind, for we had learned to love the spot and its surroundings; feeling regret, too, at having to leave so many friends whom we might not see again. 'For we know not the way we are going, nor yet where our two ways may meet, or may cross. Life hath set no landmarks before us.' But then came a comforter in the thought that this was the first step towards that accomplishment to which all are beginning to look forward—a return to old England.

## CHAPTER XII.

VANCOUVER ISLAND TO SAN FRANCISCO—EFFECTS OF A GALE OF WIND—
MAN OVERBOARD—ARRIVE AT SAN FRANCISCO—ILLNESS OF THE PRINCE
OF WALES—DANCE ON BOARD, AS DESCRIBED BY THE 'CHRONICLE'—
A COLLISON—FAREWELL TO SAN FRANCISCO—REMARKS ON AGRICULTURE AND MINES—ARRIVE AT MAZATLAN—STATE OF MEXICO—REQUISITIONS OF THE REVOLUTIONISTS—DANCE ON SHORE AND ON BOARD
—MEXICAN CHARACTERISTICS—SEINING PARTIES—LEAVE MAZATLAN
AND ARRIVE AT SAN BLAS—LOCAL TORMENTORS—THE INDIAN CHIEF.

THE anticipations that some unpleasant weather would be experienced before reaching San Francisco were destined to be fully realised, for we were scarcely clear of the Straits of Fuca when a strong south-east gale commenced, accompanied by a heavy sea. For two days it blew with great force, and rained continually, the ship rolling as much as 41°.

This unusual motion created great havoc amongst the many articles comprising a sea-stock, as well as property of all sorts, which, in the hurry of departure, short interval between meeting the gale, and long immunity from the necessity, had not been placed in a state of safety. Vancouver is justly renowned for its apples, which we did not forget when leaving. There were few places where the contents of two or three casks containing these did not penetrate during the first night, and made a pleasing variety when mixed with antlers, photograph-books, desks, and mixed pickles, well seasoned with salt water, and reduced to

submission by the repeated attacks of an ice-chest, which fetched away and defied all efforts for some time to restrain its energy.

The ports appeared better adapted to letting the water in than keeping it out, not having been properly fitted when the ship left England. The surplus water thus received found a good outlet below, for the working of the ship opening the seams of the deck in many places, the water took advantage of it, and few cabins were without a complete shower-bath. Complete in that it did not leave an inch free from its effects; and sleep only was procurable under an umbrella and two waterproofs to those who, having buffeted wind and rain for four hours on deck, did not feel disposed to seek new habitations.

Up to the morning of December 4, though there had been much discomfort, no accident had taken place of any description; and, on seeing a gradual return to fine weather, we were beginning to congratulate ourselves on our immunity from the usual consequences. But on that day we had the misfortune to lose a man overboard, named Heath, who, with others, was employed stowing the jib which had just been taken in. A blow on the head from the sheetblock knocked him into the water, and though a lifebuoy was thrown close by, consciousness appeared to have left him, and he sunk without much effort to reach it, and before the boat was lowered. There was a good deal of sea at the time, sufficient to cause lowering and hoisting a boat attendant with risk; especially the latter, which not the most ingenious

of contrivances will ever render otherwise than a difficult manœuvre to perform successfully in a heavy seaway. But all things must come to an end. After five days of thoroughly disagreeable weather, a change for the better took place. The barometer, which had been very low, rose; and during the night of December 5 a calm succeeded. Steam was then called into requisition, and with the assistance of a light northwest wind enabled us to come to our old quarters off the Pacific Mail Steamers' Wharf, San Francisco, on December 9. As this was to be our last visit to a place where, by reason of three previous visits, we had found friends to increase, and enjoyment in like ratio, we had determined that our intended short stay on this occasion should not fall short in gaiety on that account. But soon all joy was turned into sorrow, for we had arrived at the most critical time of the Prince of Wales's illness, no intimation of which as being of a serious nature had reached us at Vancouver Island before starting. So serious now was it that a bulletin the same evening in a local paper gave a full and circumstantial description of his death, though the deep gloom on board which followed was partially removed by the contradiction on the morrow. Our friends on shore, not understanding the depth to which the feeling of loyalty has descended, or rather how it is engrafted in our hearts, though, perhaps, not strongly brought out till under the pressure of great excitement; ignorant also of that personal attachment which Her Majesty and family, especially the Prince of Wales,

CH. XII.

have always evoked from those with whom they have come in contact; rather thinking the reverse from the continual misrepresentations of demagogues—they could not appreciate that abstention from gaiety which all felt it incumbent on them to maintain; and I dare say their prayers for his recovery were nearly as heartfelt as our own, though proceeding from a different But the glad tidings of 'out of danger' came some ten days after; so, to celebrate the event, and as a last reminiscence of the 'Zealous,' preparations were made to give a grand afternoon party the following Thursday. The week commenced badly. There had been a drought for two years, and fearful things were predicted if rain did not come this year. With our usual luck in experiencing unusual circumstances, it came now with a vengeance, and with such earnestness that by Wednesday several inches of rain had fallen, whilst the wind howled continuously in a south-east gale. It did not look promising. However, we prepared; and the weather moderating to half a gale, with less rain on Thursday, our nearing departure also preventing postponement, scouts were sent out to bring those who were willing to brave the dangers of the deep. By 2 P.M. a goodly company were assembled, and dancing immediately commenced. The proceedings are thus quaintly and characteristically described by the San Francisco 'Chronicle,' under the heading of

'SOCIAL GOSSIP.

'Reception on H.B.M.S. "Zealous."

'Nereids treading the mazy with the Rulers of the Sea.

'By several of our social queens it had been prophesied that the festivities of this season would, like angels' visits, be few and far between, and many a fair heart drooped beneath the blighting announcement. But last week, in spite of the prognostications of these all-knowing goddesses, and despite even the ugly contraries of King Æolus, pleasure has reigned supreme amid our social nebula, and his star is still in the ascendant.

# "RECEPTION ON THE "ZEALOUS."

'The announcement that a reception would be given on Her Majesty's Ship "Zealous" caused a flutter among the votaries of Terpsichore. At half-past one the steam-launch left the "Zealous" and came to Brannan Street Wharf to remove the guests. But few were those, however, for the timid fair ones had been cowed by the grim aspect of the heavens. So a detachment of the officers were sent to reassure them, and offer their strong arms as escorts. The brave sons of

## 'MARS AND NEPTUNE

'are irresistible to the gentler sex, and in a very brief space of time might the launch have been seen steaming away with a gallant and precious burden. Though the "Zealous" lies well out in the stream, the distance was spanned in a very few minutes by the swift little craft, which soon lay alongside. And now was an interesting scene. The gangway was lined with officers, each having a friend on the launch—some a dozen—and, as each beauty was handed up in turn, she was

escorted by the gallant in buttons, who first claimed the honour, to the Captain's cabin (the ladies' dressing room *pro tem.*). Owing to the danger of a possible shower,

#### 'THE TOILETS

'were not very extensive, only one lady appearing en costume, and the preparations and "fixing" in the mysterious chamber allotted were necessarily brief. The first quadrille—the Admiral's set—was danced in the ward-room, on the third deck, for as yet the upper deck would not allow the light fantastic toe to be danced upon it with impunity. There were eight couples in this quadrille, and things got slightly mixed several times, but it only increased the general hilarity of the participants. Order was soon given to

## 'CLEAR THE UPPER DECK,

'and sailors innumerable set to work, sopping up the moisture, clearing away the guns, and sprinkling French chalk around. In a few minutes the soft, passionate, lingering, persuasive tones of the waltz streamed along the decks of the gallant old ship, inspiring all with pleasure, and defying resistance to its wooing. Ah, how the eyes of the fair ones sparkled, and beamed, and flashed with softest lustre as they yielded unrestrainedly to the spirit of the hour, and were whirled away in the dizzy pleasures of the dance! Verily he who wrote—

'Tell me not of your starry eyes, Your lips that seem on roses fed. 'would have had his eremitical head turned in another direction had he beheld the radiant beauty that shone on the "Zealous" last Thursday. Dance followed dance at close intervals, between which the ladies and their escorts would repair to the Admiral's cabin, where

#### 'AN ELEGANT COLLATION

'was spread. At 4·30, a fresh breeze springing up, the guests went to the gun-deck below, a more sheltered quarter, and there continued the dance till evening was well advanced, when, with many a sigh of regret, and parting farewell, they left the ship and dispersed to their respective homes. Nearly all the officers went ashore with them to fulfil engagements with their numerous friends. This reception was pronounced by all to be the most pleasant and enjoyable hop of the season.'

The following day the weather seemed to have received a new lease of violence, and sailing was out of the question. Christmas Day passed likewise mos dismally, but on Monday a slight diversion was caused by a barque, which dragged her anchors, and, impelled by wind and tide, came right across our bows, from whence she emerged in an hour's time a complete wreck, with suspicions of sinking. On our part, the loss of foretop-gallant-mast and springing of bowsprit caused a further delay, not ungratifying to many on board, and perhaps to a few on shore. The only person apparently not quite satisfied with the transaction was the owner of the barque, who had to pay for all

damages. In return for being let off easily, as far as we were concerned, he was discovered surreptitiously attempting to measure our distance from the shore, in view of recovering something, as a law of the harbour compels you to lay more than 500 yards off, under penalty of a heavy fine. I need not state he was unsuccessful. From Christmas to New Year's Day our time was chiefly employed in saying good-bye. with the determination of sailing each morning, during the course of the day it was rescinded by the weather, so that every evening the same process was gone through, turning up on the following day with the uneasy feeling of being a fraud. But, at last, we were enabled to make a start, and on New Year's Day saw the beautiful harbour recede from our view. Golden Gate closed upon us as, with saddened thought and silent regret, we started for the coast of Mexico, feeling that a bright page in our book was over, and an important link of pleasure in this pilgrimage of ours broken, most likely not to be renewed. Would that I could more ably express the gratitude which all must feel due to our worthy Consul, and his no less excellent coadjuting Vice, for their innumerable acts of kindness and uniform cordiality to each and all of us. In seeing the esteem with which they are regarded by the citizens of San Francisco, one cannot help a feeling of pride that our country should be so represented.

In placing the Union Club at our disposal during the several visits we made, the members conferred a kindness which it would be difficult to appreciate too highly, and we regretted that our power was so limited to show how much we felt that act.

It is fitting and right that public record should be made of public acts, and to bear witness to universal kindness. But the task becomes harder when we intrude upon the privacy of the hearth, and speak of friendships consummated by mutual knowledge and goodwill. To those, therefore, I do not think it requires many words to express what we felt on this occasion; feeling assured that silence will not be misunderstood, and if finding it difficult to give utterance to those thoughts, do not think it will be attributed to other than the right cause, hoping that with them, as with ourselves,

When time, who steals our years away, Shall steal our pleasures too, The memory of the past will stay, And half our joys renew.

Being now about to bid a final farewell to California, it would be as well to say a few words concerning its agricultural resources and prospects, more especially when in England the question of emigration for all classes is becoming so imperative, and also because in our different visits to San Francisco we have touched on nearly every other subject. The following remarks have been gleaned from personal observation and perusal of works on California, acknowledgment of which is due to Messrs. Cronise and Hittel, whose admirable and exhaustive accounts are well worthy of careful study. Therefore, though I may be led here

into a few trifling inaccuracies of data, the general tenor may be relied on to give a fair idea of the country.

There cannot be the slightest doubt that California is destined to become one of the greatest and surest wheat-producing countries of the world as soon as that fearful check can be avoided—an occasional drought. Fully sensible of this evil, an excellent system of irrigation has been set on foot, by which a large portion of the State may be watered. But this want has hitherto ruined many who had not the capital to stand the losses of a bad year. Sheep dying by thousands, cattle prostrated, the wheat parched and shrivelled, and even man himself obliged to flee from these arid parts, unable to quench his own modest thirst. Such is the great difficulty which in time past the agriculturist has had to contend against; and, therefore, rich though the country be in pasture land, in a soil where nearly everything can be produced with little cultivation, in a climate mild and yet exhilarating, and, lastly, where all tendencies are to favour liberty of action and to produce a life which combines most enjoyment, still, even with these advantages, the man with moderate capital would do well to pause ere he embarked in any venture which at first sight appears certain to be profitable. To the large capitalist there could not be a finer field, no matter in which direction he may turn. A bad year only comes occasionally, the next will make up a hundred-fold for previous losses. To his poorer neighbour that year, however, has been simply ruin. As an example of this great drawback, I may state that out of about 50,000 square miles which are fit for tilling in California, 3,000,000 acres are so dry that, except for small grain, they may be counted useless. But in the mildness of winter, where there is no ice or snow, California has an advantage over Eastern States. Owing to possessing such a mild climate, barns are little used here. Between harvest time and threshing there is little danger of rain, so the grain is often left in sacks in the fields for weeks till it is sold. The average yield of Californian wheat fields is 20 to 25 bushels per acre; usual weight 60 lbs. per bushel. Chile wheat gives general satisfaction, and is more cultivated than any other sort, being peculiarly suited for shipment, owing to its flinty qualities.

The system of breeding live stock in California differs vastly from that which prevails on the other side of the continent, where cattle are kept in stables and fed on cultivated food. The plan of letting cattle run wild throughout the year, and mix promiscuously, could only be successful where you have a mild climate, like that of this country and parts of South America. In both, the 'rodeo,' or count, still exists, where the cattle are collected in one spot to be counted and the young ones branded. Cows calve almost invariably before they are two years old, frequently before they are eighteen months, and sometimes before fourteen. Pure blood Durhams have lately been introduced, and a great improvement in the breed is visible. In this way cattle increase rapidly, and give little trouble, but

a greater profit might, I think, be made by a more personal supervision and tending.

But the profits derived from cattle are not nearly so large as those gained in sheep-breeding. The climate of California is peculiarly favourable to the growth of sheep. The ewes, when properly taken care of, have lambs before they are a year old, and increase 100 per cent. One born and bred in California will, when two years old, correspond with a three year old sheep in the Atlantic States. Wool is now very high, so that the wool and lamb of a good ewe are worth nine or ten times the original cost. They are seldom kept under shelter, and but one herdsman is employed for 1,000 sheep. Neither cattle nor sheep suffer from diseases which are so common in Europe. But in sheeprearing one thing must be avoided, land on which the 'abrojo,' or large burr, exists. This, if it gets into the wool, affects its value considerably, being difficult of extraction. It is generally found on the banks of small streams and low ground. It sometimes remains for one or two years under the soil before growing, thus showing the difficulty of avoiding it. One square league of land contains about 4,438 acres. quantity of good pasture should support about 10,000 sheep and their offspring for two years.

Leaving agriculture, I will conclude with a few words on mining.

This at present is the chief industry of California, employing more men and paying a larger sum in wages than any other branch. The chief mines are of gold,

silver, quicksilver, and copper. It is impossible to estimate the amount of gold that has been taken from Californian mines, but silver now claims the largest export. Speculation in mines is a mania to which all classes here are subject. The business streets of San Francisco are a sight in themselves, with their crowds intent on buying and selling stock. Shares in mines sometimes go up from \$5 to 100 in an incredibly short time, but unless a person is within the circle investment is risky. There is often not a little roguery attached to this line of business. For instance, if a mine is valuable, resident shareholders often keep the knowledge to themselves and take care that no dividends shall be declared, by which policy all who are not in the secret are driven to sell and at a sacrifice. This, which is not uncommon, is called 'freezing out,' and a very expressive term it is.

It would be impossible to enter fully into these subjects in such limited space as must be set apart for them. All are interesting. What has been said, however, added to remarks on former occasions, must go far to convince anyone that California is a wonderful country, endowed with immense natural advantages, and peopled by a race whose characteristics have ever been to improve—indeed, transform—everything on which they set their hand. Under these circumstances, we may look upon California as a state which in time to come will be distinct from her Eastern brethren; no less by her diversity of interests than by differently

marked features, but must by her power of expansion become second to none on this vast continent.

January 3, 1872.—Surely sailors will have some allowance made for them when errors of commission and omission are taken into account. What can be more trying than that continual rolling, when every muscle of the body has to be strained to preserve equilibrium? Or, when you come below, after a four-hours' watch on a wet night, to find everything in your cabin capsized and floating in water, which drips down from overhead, not sparing even your resting-place? The wind has hitherto been ahead, but shifting to the west this morning we made sail, bound for Mazatlan, on the coast of Mexico.

January 9.—The wind having all gone, got up steam on the 7th, and yesterday morning came in sight of Guadalupe Island, passing it at noon, seven miles distant. Its sides appeared most rugged, and often nearly perpendicular, but on top vegetation and green plains gave it a more inviting aspect. There are no inhabitants; but books report goats to abound, as, indeed, there are few islands in this ocean where they do not, having originally been left at one time or another by passing vessels. On the southern side are two detached islands, the whole apparently of volcanic formation. After passing Guadalupe Island we picked up a southerly wind, and stood in towards the land under sail. Cape San Lucas was rounded on January 14, and Mazatlan reached on the 17th, where the

anchor was dropped about a mile and a half from the town. The entrance to the inner anchorage is peculiar and intricate, being surrounded by rocks and shoals. We lay between two small islands, or more properly rocks, which afford shelter from the wind, but not from the swell, so that there was generally a slight motion on board.

In this place also are local evidences of changes by earthquakes some years back. In addition to these unpleasant freaks of Nature, Mexico has long been subjected to internal convulsions from its rulers, and the whole country kept in a state of anarchy and confusion by a corrupt government, and political intrigues which have for their aim the presidential chair and control of the money-bags.

Few countries present a more interesting history than Mexico; whether we speculate upon the races that inhabited it previous to the conquest—from whence or how they came, and derived their ideas of law and a morality that almost ascended into a religion; or whether we speculate, assuming that much of this record is true, upon the fatal decline this country has made as evidenced by its present state, contrasting unfavourably even with that primitive condition that knew not Christianity, but in gaining it seems to have lost all the attributes which gave them in those days a certain nobility of character. With vast mineral wealth and agricultural resources, we see the credit of Mexico down to zero, and, unlike its counterparts of Chile and Peru, European energy is

here thrown away, in that there is no security for life and property, so that the risk of losing either requires an enormous percentage of gain to counterbalance the unpleasantness of living in such a country.

But though this may retard in some measure the advancement of Mexico, the main cause is to be found in the character of the people themselves, who have no stability of purpose and are prone to change. From their ancestors of Spain they have inherited uncertainty; their Indian blood brings them cunning; and the mixture produces treachery. He would be a bold man who would predict the future of Mexico. A great deal of talking and writing is being done about the possibility of Mexico having to receive a Protectorate from the United States with a final view to annexation, while many Americans openly advocate military invasion and forcible possession. The Mexicans, however, scout the idea, and assert that in any such emergency they would quickly cease their internal warfare and become a united host to repel the invaders. If any prominent man in this country would dare even to suggest a Protectorate his head would not long remain on his shoulders. The Mexicans do not think it a very serious thing to have ten or twenty revolutions on hand; but for a foreign nation to interfere in putting them down, or act as mediator to save the nation's life, is to them a terribly serious aspect of affairs. That was conclusively shown in the tragic episode of poor Maximilian's brief career.

Retribution, however, may come upon the per-

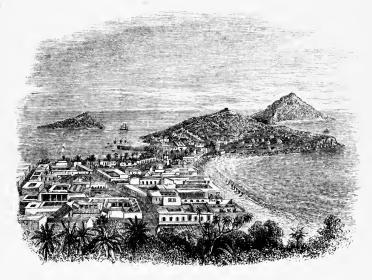
petrators of that deed, not from any foreign source, but their own inability to preserve unity and concord amongst themselves. The two principal actors in that dark tragedy which sent an indignant thrill throughout the whole of Europe have now quarrelled, and Juarez, who has been President ever since, finds it necessary to employ all his energies to defeat the attempts of his old general, Portifirio Diaz, who has raised the standard of revolution against him and aims at chief power. But, although the present supreme government of Mexico is seriously threatened by a powerful revolutionary element, well armed and equipped, it is generally believed by foreigners that Juarez will be equal to the emergency. The revolutionists up to to this time have robbed, plundered, and murdered along their tracks. The merchants, business men, and capitalists of the country have no faith in Diaz as the head of the nation, though they admit his successes in the past as a brilliant and able general.

On our arrival at Mazatlan we found it in the hands of the revolutionists, as the soldiers had pronounced in favour of Diaz. This produced an unpleasant state of affairs; for the new authorities, knowing that in a country like Mexico he who has the longest purse wins the day, proceeded to gather in the duty imposts. A Mr. Woolrich, an English merchant, had to pay \$25,000 with the pleasing probability, should the other side win, of having to pay this sum over again to them under the plea that he had no right to pay duties to rebels. Others are in like condition, and find our

arrival opportune for shipping their mineral produce, and getting it out of the country. But that has to be done under feigned names, so that it cannot be traced hereafter to whom it belonged when Juarez is at leisure to turn his attention to irregularities committed during this interregnum.

To us also comes discomfort from the fact of the mail steamer not calling here at present, thereby depriving us of all news from the outer world, which, indeed, we do not expect to remedy till arrival at Panama.

The town of Mazatlan does not on landing prepossess



MAZATLAN.

one in its favour; and the houses being so low makes it appear insignificant, whereas it has 12,000 inhabit-It is difficult to say what peculiarity strikes you in the latter, unless it is the apparel; certainly not moral or physical excellence, though in the latter respect they seem to have a slight advantage over the Central American races and also Peruvians. But as regards external appearance it is curious to observe the extravagance they indulge in to decorate the head; and this is the sole portion they think it worth while to adorn. The Mexican hat is well known from its peculiar shape and broad brim; but there is great variety in fancy ornament about it which adds largely to the price. One man came on board, evidently belonging to the lowest class, whose attire for the most part consisted of flannel shirt and trowsers. Yet he had a hat on of white felt, broad as customary, worked in silver and two butterflies in gold, while round the crown was a circle of swansdown. Curiosity prompted me to ask him the price of this article, and I was not surprised to hear it was \$30, nearly 6l. No doubt he had expended all his capital to satisfy this national vanity. It only takes one other direction, and that is in respect to horses and their trappings; as long as they are fine also in these respects, they do not mind being without a cent in their pockets. Being inveterate gamblers, where often the last article of value is staked and lost, they present an ever-varying appearance.

It is to be expected that something should be said concerning the Mexican women, who are commonly believed to derive considerable beauty from their parentage. Our stay in Mexico was so short that it

would be presumptuous to assert either one thing or the other; but it would be idle to deny that in the principal feature of the face—the eye—they possess a strange fascination and charm which seems to give a beauty to the whole, not warranted, generally speaking, should that beauty come to be analysed. A very agreeable ball was given by Mr. Woolrich during our stay, wherein was brought to a crucial test the progress made in Spanish by those on board who intend perfecting themselves, in view of drawing upon the resources of Chile and Peru for amusement during the remainder of our stay on this station. The report of progress appeared satisfactory if one might judge by the animated conversations between the flitting ornamented warriors and dark-eyed señoritas, whose eyes in many cases supplied the connecting link between disjointed sentences and eloquent speeches. Apparently the 'hereticos' were not such bad people after all, unless it was curiosity that brought so many off to a lunch and dance the Admiral gave on the 22nd. But let us put a more charitable construction on the circumstance, and believe a favourable impression had been made with a desire it should be augmented, that led so many to brave the discomforts of a slight swell. But they had a specific against its effects previously unknown to us, for all came on board eating oranges, and continued to do so until departure. introduction of this novel element gave a fantastic appearance to the scene. They seemed, notwithstanding the motion, to enjoy themselves very much, for

dancing is with them a passion: not the rapid galop or valse, but the more easy polka and mazurka, though the 'danza' is the favourite and national dance. In Mexico, as in all other semi-civilised countries, the priests retain their power over the women, though the last hold they have, for every where else is rebellion against church authority, exercised so despotically in former years. But there is no doubt that the church party in Mexico is the party of wealth and culture. It has but little sympathy with Juarez, and less with Diaz. The Juaristas are Liberals, but the Diaz men are extreme Radicals. Both are determined that the church party must be kept down, and that so far as money goes it must furnish a very large percentage of the amount necessary to carry on either the legitimate government or the revolutionary movement. The Juaristas do this 'constitutionally,' as it is called, but the Diaz party laugh at the constitution and its guarantees if they can only carry their point. The old church party, once so powerful, must bite the dust under all circumstances. Since their hopes were blasted by the downfall of the empire and the execution of Maximilian, it has bent its head to the storm. At times there have been symptoms of its revival, and in such moments the Liberals of all divisions have united to strike it to the earth again.

Talking of Maximilian, we found amongst the residents a kindly remembrance of the time when French troops were quartered in Mazatlan. The officers seemed to have left a good impression on

the better portion of the population, while the cause does not seem to have excited the same opposition that it did on the other side of Mexico.

Fortunately for us we were at Mazatlan during the most pleasant time of the year, when the heat was not oppressive, nor winds dangerous. One species of amusement a ship affords in such climes was here enjoyed in its entirety. I allude to seining parties, with which remembrance of Mazatlan will always be associated. The delicious temperature of the water, the thorough co-operation and cordiality of all concerned, and the temporal freedom of mind and body from the necessities of professional duties and discipline to engage in manual labour where all assert a share; these attributes combine to render—if so carried out as in our case--seining operations more dependent upon that than in a multitude of fishes. On January 24, finding that the mail steamer did not arrive, and having the previous day taken on board about \$200,000 worth of silver ore for passage to Panama, we got under weigh and, bidding adieu to Mazatlan, went on our way down the coast to San Blas, where we arrived on the 26th. Here we found the 'Saranac,' an American man-of-war and an old acquaintance, at anchor. In such an oppressive spot this meeting was a matter of mutual congratulation, and as they were bound north opportunity was taken to send numerous messages, &c. to friends not long left.

San Blas has not a cheerful aspect from the sea, for it consists of a low sandy beach, from which a small

river strikes into the interior, and at its mouth are the few houses that constitute the port of San Blas. The hills rise in the distance, but the interval is covered with a profuse tropical vegetation, where luxuriate all description of birds, parrots especially beautiful in plumage. A short distance from the town is another small river which abounds with alligators. The writer and another officer had good sport one day there in a canoe shooting at these animals with a rifle. At one part of the river we saw eight huge fellows lying on a muddy bank close to the river's edge. They would not allow us to come very close, but sidled into the water. A rifle-bullet in the back made one of them, about twelve feet long, give such a jump and make so much commotion that the canoe, if nearer, would have been capsized. At that moment we congratulated ourselves on being beyond its influence, for swimming amongst these animals would be accompanied by unpleasant sensations. The natives had a wholesome dread of them, and did not at first seem much inclined for the sport.

It would be impossible to visit San Blas without carrying away lively recollections of one species of local tormentor, namely the sand fly. It is extraordinary the amount of—I had well-nigh said distraction—these animals cause, for it is impossible to escape their attacks. In the evening, as soon as the sun goes down, the air is filled with these little creatures, who proceed to attack you in all parts, and being so small it is impossible to keep them off. They

penetrate everywhere, and inhabit your clothes for days after. It was ludicrous to see the arms of everybody on shore, while waiting for the boat, going like windmills, beating their faces with handkerchiefs continuously, and trying to evade this pest of San Blas all to no purpose.

About fifty miles inland is the fine old city of Tepic, capital of this state. This is essentially an Indian state, and its relations with the government of Mexico are anomalous in the extreme. It has nominally been under the dominion of Juarez, whose subordinates have hitherto filled the official posts. But the real ruler is an Indian chief named Losados, who has always assumed unto himself a certain amount of independence. Now having been called upon by both Juarez and Diaz to render assistance, he has issued a proclamation saying he will have nothing to do with either of them, and his territory will henceforward be independent of Mexico. Losados is a formidable power, for it is said he has 100,000 Indians under his command whenever he shall give the word. But a curious trait in this man is the secresy in which he lives, moving about in the midst of his followers, yet known of few, and dressed always as a common Indian. It is said he dreads assassination, as no doubt he has a right to, for his name appears to be a talisman among his followers. Whatever be the result of the duel between Juarez and Diaz, either will find a foeman worthy of his steel in this Indian chief, and difficulty in bringing him under subjection again. That he is in earnest seems proved by

the fact of replacing Mexican officials by those of his own appointing at San Blas, while the former have made the best of their escape.

Tepic is well worth seeing from the beauty of the country and gardens round about it; so a party was organised to pay it a visit. The following account by one of the party shows they were not disappointed; but such an expedition deserves to begin a new chapter.

## CHAPTER XIII.

A VISIT TO TEPIC — DIVISION OF THE POPULATION AND TERRITORY OF MEXICO—BACKWARD STATE OF THE COUNTRY—DESCRIPTION OF TEPIC —COTTON AND SUGAR FACTORIES—HOSPITALITY OF SEÑOR M——.—LEAVE SAN BLAS—TOUCH IN AT MANZANILLA—FAREWELL TO MEXICO—SAIL FOR PANAMA—SECURE A FEW TURTLE—AN ATTEMPT TO ACCOUNT FOR TIDE RIPS—ARRIVE AT PANAMA—IMPORTANT NEWS—LEAVE PANAMA FOR PAYTA—FUTILE ATTEMPT TO STOP A STEAMER—THE REAL SIMON PURE TURNS UP—ARRIVE AT AND LEAVE PAYTA—BAD STATE OF THE SHIP—THE PASSAGE FROM PAYTA TO VALPARAISO.

A PARTY of officers, including the Admiral, having decided to visit Tepic, immediately on arrival at San Blas we made enquiries as to the means of proceeding thither. On hearing that a coach started at 4 A.M. the following morning, little time was lost in effecting preliminary arrangements; the which completed, we betook us to rest at an early hour. Two of the party, however, preferred a room in the so-called hotel, no doubt bearing in mind the old proverb of 'early birds,' &c.; and having in view the pleasure of an outside seat, as compared with the high temperature of an inside. Fortunately, we found that a Mr. D--- had come down from Tepic, from the house of Messrs. Barron and Forbes, to offer his services to the Admiral and others. On the following morning we repaired on shore to the hotel, where we found Mr. D\_\_\_\_ and our two brother-officers fully equipped for the journey

and inspecting a primitive-looking vehicle, which gave one the impression of falling to pieces if disturbed. This we found to be the diligence, destined to convey us to Tepic.

After partaking of a cup of coffee and going through a very difficult process of stowing ourselves, we started about four o'clock from San Blas. Our party consisted of ten; and there was one other passenger, a stranger.

T. and S. rode outside with the driver, and no doubt congratulated themselves on their forethought in escaping the discomforts of an inside seat. We were, however, but a very short way on the journey ere heavy showers began to descend, drenching the outsiders, and causing wistful glances to be given at our snug quarters; but no one volunteered to change. The rain soon began to affect the roads to such an extent as to make them in some places almost impracticable, the soil being composed of a hard red clay and tenacious mud. This, however, did not affect us unpleasantly during the early part of the journey, as that lay through extensive lagoons and marshland, always more or less moist, and in some parts two or three feet of water. Throughout the whole of this the vegetation was very thick and varied, comprising almost every description of tropical flora—presenting a fine field for the botanist, where are so many indigenous species. To us, however, bound on another mission, and subjected to inconvenience, these did not awaken the same feelings they might have under different circumstances; nor were they assisted by having risen at such an early

hour. Frequently, notwithstanding the jerking about, some would endeavour to get a little sleep; but were soon disturbed by huge branches brushing past the windows, and depositing inside the moisture they had collected. In some places, so thick had the trees and shrubs grown over the road that we had to force our way through. Especially disagreeable did we find one species of bush, the branches of which were covered with large sharp thorns, called by the natives, 'uñas de gato,' signifying cat's claws. For this formidable enemy we had to keep a sharp look-out.

When day dawned, the rain, which up to then had been falling at intervals in heavy showers, ceased, and we were enabled to get a view of the surrounding country. It did not present a very picturesque appearance, being low, flat marshland for miles; but its monotony was relieved by the luxuriant vegetation which covered it. Thick-stemmed convolvulus intertwining form as it were a flowering wall from tree to tree, and towering amidst the undergrowth the stately palm, balancing the broad fan leaves upon its stem.

About 8·30 we arrived at the first ranche, distant about six leagues from San Blas, that being hardly a third of the journey. Here we took advantage of a momentary halt to unpack ourselves for a little relief, and then resumed our journey.

On the way from the first ranche to Navaretta, the second stage, several ducks, geese, and quails were seen; a couple of guns among the party could have made a good bag. In one or two rivers which we

passed, huge alligators lazily floated on the surface, watching for their prey. Not even the novelty of the country and excursion, however, could prevent us owning it to be exceedingly wearisome and uncomfortable. Our friend and guide, Mr. D-, consoled us by saying that he had been many years in Mexico, travelling constantly between Tepic and San Blas, but had never seen the roads in such a state. However, our skilful driver, Bruno, by means of fearful yells and loud 'achas,' in true Mexican style, induced the wearied team to proceed, and brought us to Navaretta about half an hour after noon, the time we originally expected to have arrived at Tepic. I may here remark, that during the rainy season all this part of the journey has to be made in canoes, the roads being flooded and the streams impassable.

Most of our plaints vanished in sight of the excellent breakfast we found ready for us in the Grand Hotel of the Mexican village of Navaretta, and our appetites seemed to astonish the worthy patrona; but then we started with light cargo, and had been nine hours on the way. These villages are all similar, and seem to display the lowest grade of civilisation. The houses, or more correctly the huts, consist simply of uprights driven into the ground—roofed in by a covering of dried palm-leaves. The whole family generally live in one room.

Considerably more than half of the population of these village districts are Mexican Indians. The remainder are divided—though more, perhaps, in towns

—between the Creoles, or people descended from European parents (almost wholly Spanish), and the Mestizos, or mixed races. The lower classes in this part of the country appear to belong to the latter and the Mexican Indians. These form the great mass of the labouring population. Many of them are engaged in agriculture, and a considerable number are employed in the mines. The mixed races are more generally engaged in trade and mechanical pursuits. looking at the state of Mexico at the present time, the thought arises, What has Christianity done for this country? where are the results of 300 years of contact with civilisation? In what way are the people better off than they were before the Conquest? It would, indeed, be hard to say. Assuredly not in their habitations, for if what we read is to be trusted, a retrograde step has been taken. Have they a purer Certainly, in the abolition of human sacrifice, and in adopting the rites of Christianity, they have gained much. But when we see it all adulterated with the grossest ignorance and superstition, prostituted for the benefit of an all-powerful Church, and no ray of light suffered to penetrate and illumine the minds of this conquered race, we must own, indeed, that the gain is, after all, comparatively small. Spain has a great deal to answer for. A glorious opportunity was given her to civilise the Western World, but she has only succeeded in making it an exaggerated portrait of It is not to be expected, then, that such a country can hope to attain any place among nations,

when judged by her policy in the past, or by the attributes she possesses for future greatness.

Such reflections must always be uppermost when travelling in Mexico, a country embracing every variety of soil and climate, capable of bringing forth all the produce of both temperate and torrid zones, and containing incalculable mineral wealth. But man's hand has marred the fairest portion of God's creation, distorting its beauty with anarchy and bloodshed. The remainder of our journey to Tepic was over very difficult roads and many steep ascents. Very little cultivation was visible, but the scenery was picturesque. Lofty mountains in the distance, with rugged outlines, hills and deep valleys between. From the summit of the first range we could see Tepic at the foot of a mountain called San Juan. We passed trees and shrubs of every description, while bright-plumaged macaws, parrots, and parroquets continually crossed the road, screaming and chattering. Among this noisy tribe, the note of the Mexican nightingale came forth with great sweetness. We now began to rattle along at a merry pace, and at 9.30 P.M. pulled up at the house of Messrs. Barron and Forbes, where their representative, Señor M—, gave us a hearty welcome. Accommodation was provided there for the majority, while the remainder put up at the principal hotel.

The following day we made the most of our time to visit the various places of interest in and about the town. A quarter of an hour's walk took us outside the precincts, and from an eminence we had a lovely

view of the surrounding country. From one side might be seen the low flat land in the district of San Blas with the Santiago sluggishly winding its way into the sea. On the other, a far different scene. Ranges of mountains intersected by undulating valleys, clothed in rich verdure; whilst far, far away in the distance, the volcano of Tucuman, sending forth volumes of smoke.

A few words as to the climate. The whole country is divided into the 'tierra caliente,' or hot region; the 'tierra templada,' or temperate region; and the 'tierra fria,' or cold region. The first embraces the low coast and adjacent land; such, for instance, as that of San Blas, and along that coast up to an elevation of about 2,000 feet, within which limits unhealthy exhalations and fevers prevail. Tepic may fairly be set down as being in the second region, which includes slopes of mountains, and those tracts between 2,000 and 5,000 feet elevation, within which a healthy atmosphere is experienced.

The principal produce of the plains and declivities of the table land is maize, wheat, sugar-cane, cotton, tobacco, and coffee. The staple of the cotton is rather coarse, and from it a coarse kind of cloth is made, much used by the Indians. The coffee is of superior quality, but is not extensively cultivated. Sugar and tobacco are both exported. An enormous number of cigars are made both at Tepic and San Blas. They nowhere approach a good Havannah in flavour; but those of strongest quality, if kept dry for some time, are by no means bad smoking. The point in their

favour is exceeding cheapness, for 'Conchas'—about the best brand—are 4l. a thousand.

Tepic is a well-built, clean little town, boasting a cathedral and theatre, besides having a large Plaza, which serves both purposes of market-place in the morning and promenade in the evening, when a band plays. We visited both theatre and bull-ring. The performance at the latter was rather a grotesque affair. The fight might be termed a sham one, as the bulls were almost harmless, their horns being blunted and bound in cloth. Clowns appeared on the scene of action, mounted on donkeys, causing great amusement.

The following day we drove out to the cotton factory belonging to Messrs. Barron and Forbes. We carefully inspected all the different buildings, which certainly reflect great credit on the energy and enterprise of the owners. About 300 Indians are employed in this establishment. Here are tastefully laid out gardens, with a beautiful orange grove, which formerly used to be lit up with variegated lamps, where the 'danza' in all its voluptuousness, to the murmur of soft music, was the delight of the indolent, dark-eyed Mexican Señoritas. No doubt many a tale could be told of love scenes amidst these scented bowers. Scotchman, overseer of the establishment, was quite eloquent on the subject, and heaved a deep sigh from his rugged breast when he recalled scenes of the past. Then Messrs. Barron and Forbes were princes in the land, but now the glory has departed.

Resuming our seats in the carriage, we drove out to

Puya, distant from Tepic about 4 leagues. Puya is situated in one of the numerous valleys of the district. The inhabitants are nearly all employed in the sugar factory, which we visited. The quantity made is enormous, supplying the country for miles round, besides much exported. We next visited some sulphur springs, and then returned to Tepic to spend our farewell evening. Señor M--- had kindly engaged the fine military band of Tepic, which discoursed sweet music during dinner and the remainder of the evening. The bandmaster was very anxious to accomplish 'God save the Queen,' but, finding it beyond the range of his powers, besought us to take the will for the deed. There had been no lack of either during our stay, and our last evening was indeed a merry one. All, however, were ready in good time next morning, and, bidding adieu to Tepic, we started about 4 A.M. We were accompanied this time by Mr. D-, Señor M-, his sister, and some other friends. We found the journey back by no means so tedious or unpleasant as the one up, but all were glad to alight at San Blas about 4 P.M. I cannot close this brief and imperfect account of our trip to Tepic without giving expression to our unanimous gratitude at the hospitable and cordial reception by Señor M and all with whom we came in contact.

February 3.—Left San Blas on January 31 for Manzanilla, where we arrived yesterday. The latter is a small village, consisting of about a dozen houses, and the same number of huts. It is, however, a coal-

ing depôt and calling place for mail steamers, because 80 miles inland is the rich and beautiful city of Colima—the paradise of Mexico—of which Manzanilla is the seaport town for shipping silver ore, &c. We sent a boat on shore for letters, but were much disappointed to find that by some mistake none had been left; so after sending a bag on shore to await the next steamer coming up, we started the same evening for Panama; a long cruise, owing to the calms and light winds which prevail in the interval.

We have now finished with the coast of Mexico, and, hurried though our visit has been, it was of sufficient duration to obtain a glimpse of those peculiarities by which this country appears to be held back in the rapid advance of civilisation shown by other countries. Of apparent inexhaustible wealth in mineral produce, in addition to agricultural prospects of no mean order, we have yet seen poverty in its worst form all over the land; little or no attempt made to develope those resources; while a good criterion of the country's credit is shown by a glance at the quotation of foreign stocks, where we see that Mexican securities are down to 15. Mexico, indeed, seems to be under a curse, but it is the curse of misrule, past and present. May the future have something in store by which she may follow in the path of other nations, no longer held back, but urged on to improvement, if only by a sense of selfpreservation. For, if not, assuredly she will lose all individuality, and become swallowed up in that gradual encroachment by which the chief nation of this continent seeks to gather the whole under one denomination.

February 7.—We have made very little progress since starting; nothing but the lightest of winds and calms, so yesterday we got up steam, in the hope that 100 miles further on a breeze might be met. This morning we were gladdened by seeing the sails fill. During these days of calm the heat has been intense, nevertheless the Free and Easy Company had sufficient energy to give a concert. Mr. C—— also gave a lecture, entitled 'Maximum and Minimum,' when considerable talent was shown in simplifying many abstruse geometrical problems by means of a slate and piece of chalk.

February 11.—Perhaps in no part of the world are there so many miles of calm weather as in this, and yet we are some way off the broadest belt. Consequently, at the first sign of wind, sail power was resorted to, for our stock of coal is very limited, and decreasing daily. A sad accident took place yesterday: a stoker fell down from the upper to the lower deck, and died a few minutes afterwards. It seems to be peculiarly our fate that all accidents are attended with the most serious results. For the last two or three days we have been passing turtle; so yesterday, having just got up steam in despair of wind, we stopped and sent the lifeboat to harpoon a few whilst floating asleep on the water. She was very successful, securing, in an hour's time, eleven of various sizes, the largest being over 50 lbs. weight, while the smallest was not bigger than a garden tor-

toise. When the water is perfectly calm they can be seen a long distance off. It is common to see birds perched on them, sometimes two or three on one turtle, so they are most conspicuous. On approaching a turtle thus ornamented, I saw one of the birds settle on the handle of the harpoon, when about to strike, so tame are they. This afternoon, having arrived where can be felt the influence of the gulf of Tehuantepec, from whence usually proceeds a breeze, we experienced the pleasure of seeing a ripple on the ocean, and feeling a cool refreshing breeze. Sail was made and soon the wind came strong. It is a curious phenomenon feeling the wind so strong out of the gulf of Tehuantepec at this distance from land. It is generally ascribed to the narrowness of the continent at this part, and the strong winds blowing in the gulf of Mexico coming across, are felt some distance out on the Pacific ocean.

February 19.—During the last eight days we have been slowly drifted towards our port, more by the assistance of the current than anything else. Occasionally a light wind comes for an hour or two, then dies away; but little coal prevents us from continual steaming. With an absence of wind the heat is great, too much so for debating, so lighter amusement was afforded last evening by readings from Dickens and Fielding.

For the last two or three days we have been encountering that unaccountable phenomenon with which the ocean teems, called tide rips. Now, although the various movements of the water on the surface of the

globe are but little understood, it is generally conceded that the chief cause is the wind that blows oftenest in the locality. That other forces must be at work to produce the variations we meet of surface currents is also generally allowed; but, in defining those causes, it is then that movements such as tide rips defy our ingenuity and the knowledge we now possess. Met in all parts of the world, they are, I believe, more numerous in the regions where the wind never blows, and more rapid in inverse proportion as the ocean around is calm. Yet though by observation they have been found to move at the rate of 20 and 30 miles an hour, the position of a ship passing through them is not affected in the slightest; showing conclusively that if all currents extend to but little depth, these cannot come under the category, or be attributed to a local wind. We must then fall back on the evaporation of water, or its deposition by a contiguous current. poration may take place here quicker from a greater heat, causing a rush of water to fill up the space, or it may be the neutral ground between opposite currents, or rather flowing in different directions, leaving a space of lowered water, which, to preserve equilibrium, must be raised. Hence may be these patches of agitated water in the midst of a great calm, without at all infringing on the axiom that a particle of water will visit in its turn every portion of the globe. At all events, anyone who can incontestably point out and prove the cause of this peculiar movement will do a great deal for that science which seeks to penetrate the many

mysteries appertaining to the greater half of our universe.

February 23.—We have managed at last, by means of light winds, favourable currents, and small steam, to get within 300 miles of Panama, and expect to arrive on the 25th. With a decrease of distance has come an increase of heat, accompanied by occasional heavy showers of rain. But it did not prevent a large assemblage mustering to hear a lecture on 'Modern Naval Tactics,' by C----. As an illustration, he gave us an imaginary battle between two fleets, denominated as the 'growlers' and 'loafers,' with his idea of what might take place under such circumstances as 'ramming,' 'boarding,' or 'explosion of shells in the battery.' A clever lecture, instructive as well as amusing, besides giving rise to some debate, not all agreeing with the theories advanced. It is practical experience and real warfare only that will teach us the best method of turning to account the novel material under command, and the conditions which should regulate the several means of attack and defence.

February 26.—Arrived at Panama yesterday evening, though at one time it seemed doubtful. For, during the previous night, a head wind sprang up, so that early in the morning we found ourselves with only twelve tons of coal left; wind and current against us; and 30 miles off the anchorage. Under such circumstances there was no help but to lay off under sail until wind and tide were favourable. It is needless to say the weather was watched most anxiously, and impos-

sible to describe our joy when, about noon, the desired change came about. Steam was got up, and we reached Panama at 4 P.M. It was not long before a boat-load of letters enabled us to resume that communication with the outer world which had been interrupted since leaving San Francisco on New Year's Day. The most important item was the extraordinary part taken by America in assuming that by the Washington Treaty certain monstrous propositions, known as the Indirect Claims, might be brought forward. As these simply rest on the vaguest assumptions, which could not for a moment be entertained by England, putting aside the fact of their involving a sum as large as our national debt, it will require diplomacy of no mean order to prevent a rupture. On top of this we have the sad news of the assassination of Earl Mayo, Viceroy of India; a man, both in his private character and public capacity, eminently adapted to govern that country. Should this prove to be the act of a religious fanatic again, it may cause some anxiety to be felt concerning the relations of India to the mother country.

March 7.—Having coaled at Panama, we crossed over to Taboga on the 4th, and took in the provisions that had been sent up from Valparaiso. On the following day we weighed, and succeeded in getting through our prize firing, though, as the number of our available and efficient guns is reduced to five, it was a matter of doubt whether a week would not be necessary. But one day sufficed, and we anchored again at Panama on the evening of the 5th. The next day we parted with

reluctance from some old shipmates whom bad health compelled to return to England. We could ill spare them, for a companionship of more than two years had shown that not often shall we meet their like. This morning we left Panama and are now *en route* for Payta.

March 13.—Crossed the line exactly at noon to-day. A few were on the look-out for it, but did not observe any palpable difference in the aspect of the ocean. For the last week the heat has been intense, without a breath of wind, so we have been steaming; occasionally dropping a boat and picking up turtle, and on the look-out for the steamer going north to send letters.

March 17.—Last night close upon midnight the lights of a steamer were seen approaching, evidently, as was thought, the mail. Great excitement on board. She must be stopped at all hazards. 'Fire a gun!' Bang. 'Has she stopped?' 'No.' 'Fire another!' Bang. 'Well?' 'Still going ahead.' Much excitement and wrath. 'Fire another gun!' 'Let off a rocket and burn a blue light!' Excitement and wrath of all at the highest pitch. The ship was observed close to till the light was burnt, which made such a glare that nothing was discernible. When that went out with a splutter the steamer appeared to have gone out too, for we saw nothing more of this mysterious apparition, and had to proceed sadly onward. It was suggested that as this was St. Patrick's Eve the captain of her imagined we were celebrating it by a slight display of fireworks, and did not feel inclined to approach too near. But whatever she was, the real Simon Pure turned up this morning, when a steamer appeared, which, when within hailing distance, turned out to be the 'Payta,' bound for Panama, the one we were looking for. She was politely requested to heave-to, which she did, and our letters were placed on board.

March 20.—At sea again, having left Payta yester-day evening, where we had arrived on the 17th. At Payta an examination of that part of the ship which eighteen months ago showed signs of decay took place, when it was found that dry rot had spread rapidly and extensively, for it had penetrated to a depth of four-teen inches, this, too, below the water-line in the locality where rests the lower edge of the iron plating. With this diseased frame it will be unadvisable to indulge in that active service which has hitherto been our portion, but spend the remainder of our time on this station in a snug harbour, taking such remedial measures as the exigency of the case may require, before undertaking that last, long, and uncertain passage home.

March 29.—All last week we experienced, as on a former occasion, only very light winds. Now, however, have penetrated to the region of strong trades, and are making more satisfactory progress. Numbers of huge whales tell us we are on the hunting ground, but no ships are visible.

April 10.—Up to the 8th we had been steadily progressing under the influence of the south-east trade

wind towards the south. On that day the limit was reached, and a calm succeeded. Twenty hours steaming, however, brought us into a westerly wind. It was not to be depended on, for this morning the gathering clouds gave token of a change, and soon we experienced that peculiar weather generally met with on the edge of the trades—sudden shifts of wind, lulls, squalls, and heavy showers of rain. At times, if such is possible, there was evidence of two winds blowing in opposite directions at the same time; the upper sails forcing the ship astern, whilst on deck the breeze was undeniably blowing from that quarter. In these localities very peculiar weather is encountered, indicating some great atmospheric struggle.

April 18.-A few hours more steaming, and we again picked up a westerly wind on the 12th, though light, and accompanied by a heavy swell. But the wind gathered strength daily, so that on the afternoon of the 16th it was a matter of remark that we had made 40 miles in four hours. Only those who have sailed the vast Pacific in a slow ironclad will appreciate this. To produce such a result a strong wind is required, but soon afterwards it became a little more. About 3 A.M. the following morning a very heavy squall struck the ship, creating great havoc amongst the sails which were old. Through the breaking of the lee fore lift and consequent position of the yard, it was reported in two halves, which deception was assisted by the darkness. Great relief was felt when afterwards the spar was found to have sustained the

jerk without injury. It was not long before the damaged sails were shifted and the ship proceeding on her course, whilst the wind appeared to have expended all its energy in that supreme effort. Those who witnessed the occurrence record that seldom have they experienced so fierce a squall, or one that gave such slight indication of its approach. Several others occurred during the day, but none of the same magnitude.

This is our thirtieth day at sea on this cruise, and our concluding lecture was given last night by T----, on 'The Construction of Great Guns.' Those who listened and heard how perfection is combined with so much simplicity, and explained so as to bring light to the most obtuse, must have felt that in one department at least there are few flaws.

## CHAPTER XIV

ARRIVE AT VALPARAISO — BAD STATE OF THE SHIP — CRICKET AND HUNTING — GO TO COQUIMBO — PECULIARITIES OF THE EARTH'S SURFACE—THE PARALLEL TERRACES—THE TITAN ROCKS—COPPER MINES — THE WORKS AT LA COMPAÑIA—BARRENNESS OF THE COUNTRY—ATHLETIC SPORTS—SEINING—DANCE AT LA SERENA—SHOOTING—A DAY AMONG THE GOLDEN PLOVER—THEATRICAL PERFORMANCE ON SHORE—GREAT SUCCESS—REVOLUTION IN PERU—THE BROTHERS GUTTIEREZ—MURDER OF THE PRESIDENT—TRAGIC END OF THE BROTHERS—FURY OF THE PEOPLE—ARRIVAL OF THE 'DOVER CASTLE' ON FIRE—A TOTAL WRECK—AN ENQUIRY LEADS TO DIFFICULTIES—EXCITEMENT IN THE TOWN — ARRIVAL OF THE 'FAWN' AND 'PETREL'—LEAVE COQUIMBO.

WE arrived at Valparaiso on the morning of April 22, after a passage of thirty-three days from Payta, continuing to have a fair wind from the 18th.

The night before getting in it blew very hard from the south. One heavy sea came in over the poop on the starboard quarter. Altogether it was a nasty night, and we were much pleased to see Valparaiso light at 3 A.M., exactly when and where it was expected; then steamed in, and anchored at 7.30 A.M.

What a relief after having been ninety-six days at sea out of 112 since we left San Francisco; still greater to think that not again till we start on the final voyage will a distant cruise be attempted. For a survey of the ship showed her to be decayed in several places, and it was recommended that the shelter of a

quiet harbour be found whilst those temporary repairs were instituted necessary to impart strength, before venturing to encounter the uncertainties of ocean travel. Valparaiso, being subject to northers, by which great damage is often done to vessels in the harbour, was for us out of the question, and Coquimbo was selected.

We were nearly a month at Valparaiso, during which time but little occurred of note; nearly all the time was taken in coaling and caulking the ship. The 'Scylla' we found on arrival, and before she left for the north had time to find out that sea cruising had not improved our cricket; for in a match with her the 'Zealous' was beaten by four wickets, whilst a combined eleven of the two ships failed to make any impression on the redoubtable Valparaiso Club, who won by eight wickets.

The lateness of the hunting season was a disappointment, one meet only taking place during our stay. On that occasion our own officers constituted the field, and the majority were in at the death.

We left Valparaiso on May 18, and arrived at Coquimbo on the 20th.

The port of Coquimbo and its environs has been described on a former visit, though it was of such brief duration that many topics of interest connected with the country were but barely touched upon. It might justly be asserted for that reason it was presumptuous to form any opinion. But a further experience of nearly three months has shown the majority of those

impressions to be correct, at the same time to add additional knowledge, and speak with more authority on the subject.

It may be said that this coast has been the subject of many pens; and there is no doubt in the extracts from Captain Basil Hall's 'Journal,' Darwin's 'Experiences,' and other works of a similar character, but little had been left unsaid of interest or novelty. A country, however, like Chile is undergoing change day by day, as it is opened out and the resources developed. As most of these books describe the country as it was fifty years ago, there may be found as much interest in tracing the difference the interval has brought about, as gaining our knowledge by an age gone bye.

As this, however, is a journal more of our own doings than an elaborate account of the countries we visit, those will occupy a more prominent position, though not to shut out altogether such peculiarities of improvement, or otherwise, that may come under our notice.

Though races may alter greatly, both in appearance and custom, in a few years, it generally requires centuries to do the same with the distinctive features of the country itself. So it is that, in the past and present time, all visitors to Coquimbo have been struck by the peculiar nature of the earth's surface in the vicinity, as well as by the evidence afforded by the huge rocks scattered here, that in past time this part had been subjected to water abrasion for centuries, and forced

into their present position by a violent shock, or series of violent shocks.

The Valley of Coquimbo, with its parallel terraces, has been well accounted for by both Lyell and Darwin; and no doubt the same theory applies to these huge masses of granite, some of them 40 feet high, and often scooped out inside in a circular manner of such extent that three or four people could get inside with ease. The action of water alone can account for this rounded exterior and interior.

To another cause must be accredited the piling of vast rocks one on top of another, often standing apart, an exact counterpart of similar heaps which small boys by the seaside take a delight in building for the purpose of knocking down from a distance. These, however, would defy man's utmost strength and ingenuity, aided by the appliances that modern science affords for lifting heavy weights. Only an earthquake, or upheaval of the earth, could create such a chaos of order.

This is further substantiated by observing that many huge masses are cracked in half and lying against others, which are broken up by the force of contact. Though granite, by long exposure to various influences it has deteriorated, so that the outer surface will peel off easily when struck by some solid substance. Extraordinary are the positions they often stand in, and afford a striking example of that terrible unseen subterranean power.

The copper mines of Chile are very rich, and a large quantity of this metal is sent every fortnight to Eng-

land. At the present time the market price of copper is unusually high, therefore good profits are realized. At Compañia, near La Serena, are the works of Mr. Lambert, principally for the making of sulphate of copper with sulphuric acid. It is used largely in the silver mines as a most useful ingredient in separating the silver from the ore. It is an interesting process to observe the action of the acid on the ore. Strips of lead are hung in the liquid, on which forms a crustation of a beautiful blue colour, and becomes in the course of a few days, an inch thick. By this time the ore is exhausted and the sulphate taken out. To Compañia was a favourite ride or walk, for here a kindly welcome was certain from Mr. R ..., the manager, whose genial hospitality and readiness to explain everything connected with the process will always be remembered with pleasure.

A stay of three months at Coquimbo was an agree able change after the almost continuous cruising of the past two years, during which period 37,000 miles had been traversed, and 382 days spent at sea out of 826. Had it not been for this, not even the immunity of our anchorage from northers, and sheltered from all winds that prevail, in addition to a weather of the finest description, and, lastly, a regular receipt and transmission of mails, not all these could quite counterbalance the disadvantages of a neighbourhood almost as barren of amusement as it was of grass, or aught to give pleasure to the pedestrian. Here, therefore, as has been the case generally during our pilgrimage, we had to

fall back upon our own resources for amusement and relaxation—peculiarly necessary for those who go down to the sea in ships—to preserve a healthy condition of mind and body.

An acknowledgment of this created those methods by which at sea we sought to alleviate the monotony of our lives, and by a system of all labouring for the common weal, tend to bring about a good-will in the community which not even the depressing effects of a sixty days' cruise could corrode. After many varieties something new was suggested, namely, athletic sports.

This was no sooner promulgated than carried into execution with characteristic energy. A large flat plain of hard sand, which is alternately drill-ground, cricket-ground, and race-course, served us admirably on this occasion for a course, though perhaps at home such material would hardly be considered adapted. As, however, we had long been without the sight of grass, the incongruity did not strike us with the same force it would any one fresh from a green country. Here also was ample space for the vast number of spectators, some of whom came a great distance to witness such an unusual sight in those parts. appeared to take great interest in all that went on, especially the three-legged and sack race. These latter seemed to confirm them in the belief that the majority of Englishmen are mad, with but little method in it, if they find pleasure in trying to produce compound fractures.

The programme for the day showed twenty events; eleven for the officers and nine separate events for the blue-jackets and marines. As minute details for each would take too much space, the fortunes of the former only will be followed.

The first event was a hurdle race, 150 yards, six hurdles, 3 ft. 4 in. high. From a scarcity of wood the hurdles were made of rope, which was not a happy idea. For, being whitewashed, they had a most baulking inclination to the few that could see them at all. One or two severe falls were encountered before the final heat was won by Mr. Wright (sub-lieut.), though pressed hard by Mr. Inglefield (mid.). Throwing the cricket-ball was won by Mr. Warren (mid.), at 82 yards. A better throw was lost to this gentleman by the ball lodging on the stomach of one of the spectators, who, having at our practice seen the ball thrown and caught, believed it to be of soft nature, and so was not so nimble in getting out of the way as he was afterwards if the ball had the slightest tendency in his direction.

The quarter of a mile race produced a number of competitors, and a well-contested struggle; Mr. Creagh (mid.) coming in an easy winner in 1 m. 7 s. The same officer also won the 100 yards in 11 s., and the high jump with 4 ft. 8 in. The long jump was won by Mr. Corbet at 15 ft. The mile race was well run considering the short training and nature of the ground. It was a well-sustained effort on the part of Mr. Sunderland (sub-lieut.), who preserved an even regularity

of pace, which brought him in a winner in 5 m. 38 s. Mr. Great (mid.) ran gamely for a second place. The latter also won the sack race without a stumble, displaying powers akin to the kangaroo.

The three-legged race caused great amusement amongst the natives, so that it was difficult to keep a clear course. The race was so well contested that a tie resulted, which eventually terminated to the benefit of Messrs. Martin and Montgomery (mid.).

The sports concluded with a consolation stakes of 250 yards, which proved equal to any of the preceding events. Mr. Great led in good style till within a few yards of the winning-post, when Mr. Warren (mid.) came up with a not-to-be-resisted rush, passed the former, and landed a winner by a yard. Thus ended a most successful day, long to be remembered in the annals of Coquimbo.

Our stay was also marked by an exchange of hospitalities in the way of dances; and a ball at La Serena, given to the Admiral and officers by the members of the Club, proved most attractive. That it was successful may be inferred from the fact that after 6 A.M. a party adjourned to the Hotel, protracting, in mutual signs of friendship, the hour of taking rest. Seining parties were at one time numerous, though the number of fish taken was not great. A species of dogmackerel abounded, which appeared to scare other sorts, but in a certain corner, near the copper-works, very often a good haul of mullet was obtained; though a quantity of weed made the work somewhat heavy. The electric fish was occasionally caught.

There is no shooting to speak of in the vicinity of Coquimbo, though a few snipe were obtained at times in some marshes near La Serena; on the plains, however, at the back of Guayacan, a large number of golden plover annually make their appearance. only remain in flocks for about three weeks, and it is difficult to say what is their object, for the ground on which they congregate is destitute of the slightest vegetation, being all sand and stones. If it be for food, insects alone can account for their presence. Anyhow, it caused an exodus of guns and small battue parties. By this means birds were kept on the move from one to the other, so that on a certain day united efforts produced a bag of five score. They are much lighter in plumage than the English golden plover, but similar in other respects, being moreover capital eating. going after them singly it was most difficult to approach within shot, while no cover was obtainable for stalking.

But cricket was the only amusement that did not once fail. Two matches were played against an eleven gathered from all parts through the energy of Mr. Reynolds. The 'Zealous' was victorious in both instances. In the first match winning by one innings and 83 runs, and the return match by one innings and 73 runs. But perhaps the chief event of our stay at Coquimbo was what all felt to be the final effort in theatricals. As this description of amusement had been born in favour and nurtured in success, it was determined the finale should not be unworthy. There is no theatre at Coquimbo, but a large upper attic having been

lent for the occasion, it was soon transformed into a very fair one, a stage built and scenery transported there.

The performance came off on July 20 for the joint benefit of the Protestant Cemetery at Guayacan and Roman Catholic Chapel at Coquimbo. This happy combination of object had the effect of producing much interest and good-will, and by that, as also by its uncommon nature, a crowded house.



THEATRICAL GROUP OF OFFICERS.

The pieces were three in number — 'Bombastes Furioso,' 'The Babes in the Wood,' and 'A Regular Fix.' The first two had been played before at Vancouver, but the last was new. Suffice it to say that all went off most admirably, and when the curtain fell at the conclusion, loud cheers testified to the complete

success and pleasure all had derived from such an unusually good entertainment.

A practical proof of the large attendance may be found in the fact that, after paying all expenses, the sum of 46l. was divided between the two objects for which it was given. In the beginning of August we were startled by news of a most sanguinary revolution in Peru, which, on arrival of the mail steamer from Callao, was confirmed. Did we not know them to be facts, it would be difficult to believe such events could take place in this century; even though not long since worse were enacted in one of the first countries of Europe. The tragedy in Peru seems to have been brought about by the ambition of one man to force a dictatorship on the country, who by attempting that old struggle of ruling without the voice of the people speaking through their representatives, brought down upon himself and assistants a richly merited fate.

The President of Peru at this time was Don José Balta, an elderly man, of mediocre ability. His time of office had nearly expired, and speculation was rife as to who would be his successor. Don Manuel Pardo, the popular Deputy for Lima, was nearly sure of obtaining a majority of votes. At this juncture, Don Tomas Guttierez, a general in the army, whose entire sympathies he thought to have, determined to make a bid for power, assisted by his two brothers, Silvestre and Marcelliano.

On July 22 General Tomas Guttierez declared himself Supreme Chief of the Republic, and issued several

proclamations. At the same time, Colonel Silvestre Guttierez went to the house of the President with an armed force, from whence he conducted him as a prisoner to a place of confinement. An order was given to arrest Don Manuel Pardo, but the bird had flown.

The troops were placed under arms in the Plaza, whilst Marcelliano endeavoured to persuade the chief personages of Lima to favour the pretensions of his brother; but without success. When Congress drew up a protest against these proceedings, it was forcibly dissolved.

These bold measures created the greatest consternation; no one knew what would come next, and for two days there was an interregnum of stupefaction. Then came a change, which first originated at Callao. The initial movement was taken by the fleet on the 25th, which unanimously refused to acknowledge Guttierez, and withdrew from Callao. This brought about his downfall. Events succeeded each other rapidly. The troops wavered, and many deserted to the people, especially in Callao. Silvestre Guttierez was proceeding there with reinforcements, when he was shot at the station, and that was the signal for a short but bloody struggle in the Plaza, between the few troops remaining firm to Guttierez and the people. The former were, however, soon overpowered.

Marcelliano Guttierez, enraged at the death of his brother, hastened to where Don José Balta was confined, and there, with two or three others, brutally murdered him. The body afterwards presented a

horrible spectacle, having four bullets in the head, and several in the body. Marcelliano then hurried to Callao with all the soldiers he could muster, firing upon everybody he met or saw, and then went into the fort. At 10:30 P.M. he was killed by a rifle-shot, and the fort passed into the hands of the people. The chief actor, Tomas Guttierez, finding himself deserted by everybody, took refuge in a drug-store. Here he was found by the enraged populace, dragged out, and his body immediately ripped up with a dagger. The bodies of the three brothers were afterwards strung up to different parts of the cathedral; then, a fire having been kindled in the Plaza, on it were cast their remains. The people, infuriated into madness, took a devilish delight in these acts; but only for this latter part can any blame be attached to them. Beyond what has been related, no outrages were committed, no advantage taken of the general confusion to pillage.

With the death of these men order resumed its sway, and thus came to an end one of the most momentous periods that Peru has gone through for many years. May this terrible ordeal have the effect of putting on a firmer basis the government of the country, and instil in the hearts of the people that dislike to violent change and individual ambition, indifference to which has been the reproach of Peru for some time past.

A general election resulted in favour of Don Manuel Pardo, whose presidential term gives promise of being one of improvement.

Another event was the arrival, on fire, of a large steamer, called the 'Dover Castle,' and hired by the Pacific Mail Steamship Company. She was laden with cotton, and had on board, besides, a large quantity of silver and copper ore.

The fire was discovered the night before, but underneath so many bales of cotton as to prevent extinction by pumping water on it. The determination arrived at then was to sink the ship in shallow water, and smother the fire. This was done, but not in deep enough water, and at midnight smoke turned into flame, and soon the whole interior of the vessel was consumed, leaving only the shell of iron. It was two or three days before that was cool enough to visit, when she was found to be a complete wreck, on the eve of breaking up. The only course left to pursue was to employ divers in getting up the ore and those bales of cotton undamaged. Thus a good deal was saved, but the vessel herself appears too far gone to repay any effort.

A naval court of inquiry into the disaster deprived the captain of his certificate for six months for inaction and want of judgment. The latter part of the occurrence nearly brought the two countries into collision, for the Chilian authorities suddenly were taken with the idea of also holding an enquiry. With this end, the crew were warned to appear; but they had taken their passage to England by steamer, were on the point of starting, and did not see why they should suffer delay. Consequently, it was requisite to take them out of the steamer, and for a short time they were confined in the Calaboose on shore. Great excitement prevailed, and, as the lawyers would say, this was a very pretty case.

Our interference was called in, and there were rumours on board of serving out ammunition and crossbelting, &c.; but peaceable measures produced a compromise and saved the town. The men were released on guarantee, and underwent examination. It is believed the later correspondence concerning the matter will shortly be issued from the Foreign Office in the form of a blue book.

About this time arrived the joyful news of the commissioning of H.M.S. 'Repulse' to relieve us, and our orders to proceed home in November. As a convoy for the journey was suggested, H.M.S. 'Scylla' was ordered from Panama to Vancouver, to bring down the crews of 'Boxer' and 'Sparrowhawk' for passage to England, meet us at Valparaiso, and accompany the ship home. Thus all bade fair, and we only had to await the course of events with patience.

The arrival of the 'Fawn' and 'Petrel' was the termination of our three months' stay at Coquimbo. A time that, if devoid of startling interest, was nevertheless one of uninterrupted quiet, which we more needed. It was with mixed feelings, then, that we said goodbye to our refuge and brother wanderers in the 'Fawn' and 'Petrel.' Seldom, indeed, on this vast station, do you meet other ships, and then only for a brief period. No wonder, then, if the union is closer when such

occur; and as we steamed out of Coquimbo Harbour, on the 20th of August, the cheers of those left behind could not quite remove a saddened thought in memory of those afloat, as well as for those on shore, who, whatever their sphere, had done the utmost to lighten the cares appertaining to a naval life.

## CHAPTER XV.

ARRIVE AT TALCAHUANO—IMPROVEMENTS—RAILWAYS—AN ATTEMPT TO GO TO MALVOA—STOPPED BY A LANDSLIP—BOAT EXCURSIONS—SHOOTING—GO OVER TO TOMÉ—MARRIAGE ON BOARD—THE DIEZ-I-OCHO—HIGH MASS—BANQUET AND SPEECHES—THE SOUTH OF CHILE—ITS CLIMATE, SOIL, AND ADVANTAGES FOR FARMING—A TRIP TO CHILLAN—FEARFUL STATE OF THE ROADS—CHILLAN—SAN CARLOS—FINE APPEARANCE OF THE WHEAT—PARTRIDGE-SHOOTING—GO TO VALPARAISO—GRAND BALL AT SANTIAGO—FROM VALPARAISO TO SANTIAGO—ACCOUNT OF THE BALL—A FEW FACTS ABOUT CHILE—HOW GOVERNED—CHARACTERISTICS OF THE RACE—INFLUENCE OF THE PRIESTS—A—HIDEOUS ABSURDITY—FUTURE PROSPERITY PREDICTED—APRIVAL OF THE 'REPULSE'—BID ADIEU TO VALPARAISO.

Talcahuano, in the Bay of Concepcion, was reached on August 25. The change in the appearance of the country, as dependent upon a lower latitude and greater moisture, is peculiarly marked. But it involved cold and rain, which, in pursuit of sport only, was not heeded. The day following our arrival it blew a norther; but the island of Quiriquina makes an efficient breakwater against the heavy sea that would otherwise set in.

Since we were in the bay, eighteen months ago, the railway has been completed to Concepcion; and beyond, along the banks of the Bio-Bio, as far as Malvoa. It is ultimately intended to go to Chillan, and from thence to Santiago. This will have the effect of opening up the country considerably, enabling the

farmers to transmit their grain and cattle with facility to the coast.

An opinion was expressed on our first visit to Tomé, that that town, from its more advantageous position in the bay, was likely to be the principal port of the south in the future, as the channel of that great grain export which is annually increasing But the present inability to extend the railway to Tomé, from natural obstacles, more than counterbalances its advantages, and must, in the future, decide which shall be the southern Valparaiso.

As the railway has only been opened eight months, the peons have not yet recovered their astonishment at this extraordinary animal; and many are to this day convinced there are horses attached to it somewhere, though concealed from view. It is a single line, the cuttings of which are in many places insecure, should heavy rains take place. Moreover, there is no telegraph wire. The two combined often produce inconvenience, of which the following episode is an instance:—

A party of four, including the writer, started from Talcahuano to go to Malvoa, sixty miles up the river Bio-Bio. Good shooting is reported in the vicinity, and the scenery of the river is well worth a visit; indeed, it is sometimes spoken of as the Chilian Rhine.

The train took us to Concepcion, a town already described, where we spent the night in the same hotel as is there mentioned. The next morning we started by train, and for about twenty miles proceeded along

the banks of the Bio-Bio, which seemed likely to fulfil our expectations. The river here is broad, and opposite, well-wooded hills, almost down to the water's edge, gave that resemblance to the celebrated German river, which is augmented by having the same rapid movement of water. On it, sweeping by with the stream, passed barges, laden with pasture from the rich fields some miles up. The occupants, often a family, sitting talking and laughing, thinking not that on the morrow they will be like the barge they have just swept past, toiling back against the strong current, scarcely able to overcome it. With their long poles, one end on the bottom and the other against their shoulders, they will have to walk from forward aft, without rest, or ground will be lost. While contemplating some of these toilers of the river, and thinking what unpleasant work it must be, the train suddenly stopped, amidst some shouting. Descending, we found the engine brought up about five yards from an obstruction. A large landslip had taken place the night before right across the line. Very early in the morning a horseman had been sent to Concepcion to inform them at the station, but he fell a victim to 'Chicha' and the 'Sama-Cueca,' so never reached; and we started without knowledge of the disaster. It was round a very sharp turning, too, not to be seen till too late to stop the engine; only the noise of men working at it warned our engineer of something unusual. The next thing was to push the train back to Concepcionrather a delicate job, where the turnings are so sharp

that often the driver could not see the last carriage. There was also another train, full of workmen for the line, which left ten minutes after ours, and therefore now should be close.

No telegraph, and no horse at hand; so the collector had to foot it back as best he could along the line to stop the other train. We followed, stopping at intervals when coming up with the breathless messenger, who, unaccustomed to run, and shoed in Chilian fashion, was not up to much beyond a hundred yards. The consequence was, slight emotion in the train, only relieved when both trains stopped a hundred yards from each other, and then backed into Concepcion.

As the line was not clear on the following day we returned to Talcahuano, much mortified at our failure.

Another excursion was taken by a party in the first gig, to penetrate to the source of a small river; but the strength of current prevented them from attaining a greater distance than five miles, though absent four days. An attempt was also made to ascend the Bio-Bio in a small whale-boat, but, from the same reason, it was found to be impracticable.

We were somewhat disappointed in the shooting at Talcahuano, having looked forward to it as the *ne plus ultra* of the South in the way of sport. It has a great reputation for snipe and duck, and by the country round, which is low and marshy, they certainly should be plentiful. Unfortunately, we were a month or two too late in the season, and therefore cannot justly by

our experience deny the place its chief charm. The best time of the year is in June and July, when there is no doubt excellent duck and snipe shooting, and a fair amount of wild geese and white swans.

On September 10 we sailed across the bay, and anchored off Tomé. We found but little alteration here since our visit, except that continual rain for a month has given the country a richer hue of green; and the presence of several ships loading with wheat testifies to that progress which was then predicted.

An event here occurred which deserves mention: viz., a marriage on board, there being no Protestant pastor in Tomé. It was an unostentatious ceremony. The couple, who had neither youth nor beauty, were attended by six friends-half of each sex, of similar attractions—who supported their faltering footsteps. During the ceremony, which took place in the admiral's cabin, a curious incident occurred, when the ring was given to the minister, who signified to the bridegroom that he should place it on the left hand of the bride. He appeared confused, and the minister, thinking he was extremely nervous, went to his assistance in placing it there. To his embarrassment it was found that the lady had no left hand, which no one had noticed before. It was necessary, therefore, to substitute the other, which was whole. At the conclusion of the ceremony, cake and wine went round. The occurrence was duly entered in the log; and the happy couple returned on shore to spend the honeymoon. They have intention, I believe, to christen

their first-born 'Zealous,' which would answer equally for either sex.

It was at Tomé we had an opportunity of witnessing that great festival anniversary of Chilian Independence, commonly called the 'Diez-i-ocho.' It was on September 18, 1810, that Chile, having cast off the Spanish yoke, declared herself a free and independent republic. Every year, on this day, the country is turned upside down. In no other country of the world—except, perhaps, in the United States on July 4, in a smaller degree—are such paroxysms of delight indulged in. Amongst the lower classes it passes all bounds of restraint. During that week labour is at a stand-still; and employers are forced to put up with inconvenience that this national glorification may be celebrated with becoming honour.

We received a cordial invitation to participate in the ceremonies, which commenced very early in the morning, by the whole population assembling in the Plaza to sing the National Anthem. At half-past ten about thirty of us, arrayed in cocked hats and epaulettes, proceeded to the Governor's house. He received us; and then, accompanied by the other civic authorities, we formed a procession to church, passing through a guard of honour composed of local militia. Up the centre of the church were two rows of chairs, facing each other. We filled one row, and leading citizens the other. High mass then commenced, with all the attendant ceremonies. The presence on shore of our band was requested; so they were sent for, and,

to our surprise, soon made their appearance, taking position near the organ. At the elevation of the host, under the instruction of a master of the ceremonies, they struck up a lively march, being with difficulty stopped when required. To us it had a curious effect, hearing those well-known strains accompanied by all the power of the big drum. In addition, there were sounds outside as of a broadside of small guns, so it appeared as if Pandemonium had been opened.

A gentleman among the congregation appeared to be suffering under a depression of spirits evoked by the solemn occasion; and standing out facing the people commenced a confession, which was hardly intelligible. He was promptly led to a seat, and subsided again till the finish. Many there were uncharitable enough to say he was an enthusiastic keeperup of Diez-i-ocho, and slightly elevated rather than depressed. The ceremony proceeded without notice of this little incident, and concluded with a long oration on the glories of the Independence.

Forming procession again, we returned to the Governor's house, where a truly sumptuous luncheon was served. Our band attended in the antechamber. As soon as appetites were appeased, speeches followed, national and local, but all complimentary; the excitable Chileños bursting in with loud hurrahs, and brandishing their glasses with infinite danger to the crockery and their own countenances. Our band caused some amusement by the persistent way in which they played the Chilian and our anthem alternately. Immediately

clapping took place, off they went—generally the wrong tune to the right toast. Another time, the venerable curé was in the middle of a most pathetic speech. Hearing some demonstrations of applause, they immediately struck up, 'For he's a jolly good fellow,' which they had been told to play when the health of the Governor and his family was drunk. The effect was irresistible; all joined in with the well-known strains, including the venerable gentleman himself, who attempted to pick up the chorus, under the impression it was sacred music for the church.

All appeared to have changed their natures. Even the Governor, a sedate, dignified man, would occasionally startle us by emerging from his shell of reserve, and, rising energetically, call violently for cheers. The various speeches were ably translated by our Consul, Mr. Vaillant.

After lunch we formed procession, and, headed by the band, marched in state through the town to the German Consul's house, whose garden, most tastefully laid out, is the chief attraction of Tomé. But our journey was similar to that of the celebrated King of France and his army, who went up the hill and came down again. Nor have we been able to find out why it was taken, being devoid of refreshing incident, though the day was hot.

The afternoon was now well sped; so after stopping at various parts of the town to sing the anthem, assisted by the whole population, we returned on board.

Notwithstanding the, to us, many ludicrous features

283

of the day, there cannot be the slightest doubt of the deep earnestness with which the population of Chile enter into its celebration; and though, perhaps, I have here rather dwelt on the amusing than the serious, it would be ungrateful in the extreme not to bear witness to that cordial hospitality and hearty desire to please, of which we were the objects on this day.

The interior of the south of the Chile is but little known even to themselves. Between it and Patagonia is the territory of Arauco, the Indians of which, known commonly as the Araucanians, have for years kept up a bitter feud with the Chileños, or Christianos, as they call them.

There is no doubt they are a superior race to the Patagonians, more cleanly and domesticated in their habits, tilling the ground and rearing cattle. They are brave in the extreme, fighting well in time past to prevent the encroachment of their enemies. long time they have succeeded; and though Chile has secured a portion of the territory, and has had continually about 1,000 soldiers on the frontier, it is only lately they have been enabled to procure that security for life and property some distance this side, without which the riches of that part cannot be available. Now, by a line of forts and treaties, territory there is almost as secure as in the capital itself.

Possessed of a most healthy and equable climate, a soil rich in its virginity, extending for miles in flat plains, well wooded and watered in parts, to a farmer there could not be now a more advantageous spot, or

where he will find a better market for cattle and grain. There is a large exportation of the former into Peru, a premium of ten dollars being given for every bullock landed at Callao; besides that, the home consumption, and what are required for labour, is very large. Nearly all the working of land in Chile is at present done with oxen. The grain crop is sure and regular, cutting almost as great a fixture as the twelfth of August or first of September is for shooting in England. Droughts are unknown, and the exportation of this cereal is annually increasing. These favourable properties, in addition to the exceeding cheapness of land in the south, render that part of the world superior to the Argentine side in all respects, save that there are fewer Europeans. The farther from civilisation, and therefore nearer the Indian territory, the cheaper the land; in fact, it is possible to rent from these Indians large tracts of land for next door to nothing, and now without much fear of losing your property.

A little farther north good land can be bought for two dollars an acre. This may be considered the best part, where wood and water abound, and to which it will not be long before the railway is extended. Angol is the principal town here, being the headquarters of the troops on the frontier, though formerly in Indian territory. All this is but a continuation of the great valley in which Santiago is situated, lying between the Andes and sea range of mountains.

It has been seen how an attempt to pay a trip to that locality was frustrated; but whilst at Tomé, our Consul there, having need to go to Chillan, asked three of us to accompany him for a week; an invitation, it is needless to say, we gladly accepted, more especially after good accounts of partridge-shooting in the vicinity.

This town is considerably to the north of the portion I have just been speaking of, being sixty miles inland from Tomé, but in the same valley, and reputed to be—agriculturally speaking—one of the most productive spots in Chile.

For a whole month it had been raining incessantly, consequently the roads were in the worst possible state. The morning appointed for starting broke most unpromisingly, for it poured incessantly. Nevertheless, and not without grave misgivings that the roads would be impassable, we started in two buggies—travelling in that way being more agreeable than in the great lumbering coach, which is the only public means of conveyance to Chillan.

As we anticipated, the first eight miles was a trial alike to horses and springs, as well as inmates. It seemed to be a race which of the two would break down oftenest through defective harness, though quickly remedied with a piece of hide—a most useful article to carry. The mud and water were continually up to the horses' knees; the road, moreover, for that distance, was a steep hill, full of holes.

We persevered, however, and at last succeeded in reaching the village of San Rafael, where we found the coach bound on the same journey. It was drawn by six horses abreast, and of antique type, being so high that a chair had to be used on entering. A man on horseback accompanied, with a lasso. Going up hill he secured this in front, and assisted; going down hill he secured behind, and acted as a drag! We passed them shortly after leaving San Rafael, when the old coach was rolling about on the springs like a ship in a heavy seaway.

By this time the rain had ceased, and the day promised to be fine, allowing surrounding scenery to be surveyed. Never grand in lofty mountains, or picturesque in steep precipices, there was however a quiet beauty and rich tinting on the slopes far preferable to us, whose experience had so long lain in an opposite direction.

Nor could there be any accusation of flatness, for we had been gradually ascending by a series of hills to a height of 4,000 feet above the level of the sea. But it was now getting late, and sixty miles on a bad road is no joke. One or two small rivers were crossed; one so swollen by the rain as to be on a level with the bottom of the carriage, and the horses were barely able to hold their own. Glad indeed were we when the heights of Chillan came in sight, shortly after crossing the 'Nuble,' and to alight at the hotel at half-past eight, having been twelve hours on the journey. We had the same horses the whole way; and it speaks well indeed for Chilian horses that they should have performed such a trying task without food or rest. Our drivers also showed astonishing patience and skill.

The next was a day of rest and inspection of the

town. There is a great similarity in all; but Chillan has made considerable progress in the last few years. The population is now about 16,000. Amongst other establishments visited was a brewery, where they were making what was called Tennent's ale. It consisted in putting their own brew into bottles with his label. We tasted some, and though not bad, wished Mr. Tennent had been present to observe whether he appreciated the compliment. This custom is rather extensively practised in Chile, where there is now a large consumption of beer. It is considered quite correct in the way of business.

It would be difficult indeed to find in Chile any town or village without a Plaza of some description, and always with the cathedral or parish church in one corner. Both in Chillan are onamented in better style than the majority. Want of life, though, is the prevailing element, and which generally has a depressing effect upon a stranger. The streets are empty; the houses present no variation, all seeming to consist of two rooms on the ground floor on each side of the door, though in reality they go back some way when you penetrate inside. From the outside, these onestoried houses do not present cheerful ideas of home life. Further acquaintance with the internal life will, however, induce you to modify your ideas in that respect; and having broken the ice, find a genial hospitality to the stranger—especially to Englishmen not so readily rendered in other countries. The next day we drove out to shoot on a gentleman's farm,

though principally engaged in vine-growing. A great deal of wine is made in this part, soil and climate being most favourable. It is rapidly superseding the light imported clarets, being less harsh and more agreeable to the palate. This business gives very large profits. We found partridges scarce, but wood-pigeon and doves in abundance; the former, big birds of dark plumage, with a tinge of red on the breast. The next afternoon we proceeded in a northerly direction to the village of San Carlos, twenty miles distant. The road, which extends to Santiago, is broad and level, with beautiful country on both sides, large fields of wheat, and pasture land of the richest kind. From this elevated plain or valley we had a good view of the Andes, about thirty miles distant. Being so near, and the atmosphere so clear, the snow tops were wonderfully distinct, but not appearing of great height from our own elevation. We could plainly see the volcano of Chillan, at present quiet, but not long since in active operation. I believe the noise then was heard at Tomé.

San Carlos at first sight appears to consist of a few straggling huts, but increases in size and respectability after passing these. We were agreeably surprised to find quarters at a very fair hotel. A solitary Englishman made his appearance, who had been located a short time in the place, and was glad to meet countrymen again. Not often does the stranger penetrate to San Carlos, and our arrival seemed to create some little commotion.

Early the next morning we drove out to Mr. V.'s

farm. The country here is better for grain than at Chillan; in fact, it would be difficult to find a finer country for wheat in any part of the world. At this time, though only half grown, it here showed a marked difference to the wheat round about Tomé, having twice the height and thickness. Its general produce is about fifteen reaped for one sown; but I was told a case of a small piece of ground which returned a hundred for one.

We found partridges very abundant, though never in coveys, which prevented a large bag. Ours consisted of twenty brace. In the evening we were invited to a family 'tertulia'—a word hardly translatable into English, but meaning a gathering of friends. This practice is common in these towns, and may be considered to correspond with our habit of calling, though at a different hour, when tea and dancing take place.

Though none of our kind friends spoke English, we soon found ourselves quite *en famille*, and plunged boldly into broken Spanish, quadrilles, and polkas. In these little *réunions* much stiffness is thrown off, and you soon feel quite at home, if able to speak a few words of their language. The desire to please is strong, and goes a long way.

The following morning we bagged eleven more brace of partridges, and in the afternoon returned to Chillan.

The journey back to Tomé was under more favourable circumstances of weather than that to Chillan,

with nothing to mar except the thought that it concluded a most pleasant week's cruise. I must say this was mainly owing to Mr. V., who, though he went on business, devoted nearly the whole of his time to us, doing everything to promote our comfort and enjoyment; while his own genial companionship, knowledge of the language and locality, made us feel that without him the trip would have been of little worth. We left Tomé on October 11, and arrived at Valparaiso on the 14th, in order to await the arrival of the 'Scylla' and 'Repulse.'

Our last stay in Valparaiso was signalised by an event in which it does not often accrue to the lot of a ship to participate. During the last nine months but little gaiety had broken the even tenor of our way, so that when the Intendente of Santiago telegraphed an invitation to the Admiral, requesting his own and officers' presence at a grand ball on October 22, such an opportunity was not to be lost, and thirty officers showed their appreciation by attending.

The present Intendente of Santiago is a man whose reign has been marked by improvements of no mean order. With the variations of rule this continent has undergone in the last half century, he was for many years an exile; but turned, in countries of greater advancement, those years of temporary banishment to good account. He is now employing the ideas gained there for the benefit of his own country, which, in return, rumour says, will place him in the presidential chair.

His latest work was the building of a fine market-place—a want greatly felt for some time, as this city has increased in size. The completion of this, and its inauguration by a grand ball in the interior, was the event to which we received a most cordial invitation, tickets being sent to every officer, and a free pass granted by rail. The line between Valparaiso and Santiago has now been opened about fifteen years, and was then considered a wonderful specimen of engineering skill; but we have progressed so fast in that direction, that other and mightier works have caused this to lose much of its former prestige. Thus a brief description will suffice. It first runs for some distance in the valley of Valparaiso, then crosses the sea range of mountains, and emerges on to the great plain of Santiago.

A few miles outside Valparaiso, and all features change. You have a running chain of beautiful gardens and villas, assisted by the natural productions of the soil, all growing luxuriously. It would be impossible to minutely describe all the variations of scenery that take place in this journey of one hundred miles. The most marked change was on quitting the level plain, and ascending by slow degrees till we began to wind in and out among the mountains, the line in many places curving on a very small segment. This is most noticeable in one particular spot, known as Maquis Bridge. This is over a chasm about two hundred feet deep, and supported by uprights of iron resting on a stone foundation. Though not more than a hundred yards wide, it is the height and length of supports

that makes its strength at all doubtful, though there can be none as to the constructive skill displayed. There are but few tunnels, though in many places the solid rock has been cut through, giving little more daylight. In this way the line is enclosed for several miles, and numbers of animals, having got on at this point, unable to get off, have run before the train till run over. An engine-driver told me that one day he chased a horse twenty-seven miles before the train came up and terminated his existence.

But certainly the prettiest part is when you emerge from these mountains on to the rich plain of Santiago, and see the Andes but a few miles distant, their snow tops glistening in the sun. Every variation shows most distinctly, so clear is the atmosphere. At this point we entered a garden region, which continued till stopping at Santiago station.

On arrival, some little trouble was experienced in finding quarters; the principal hotel (Grand) not being able to take in such a flock. As we had come up under the impression that rooms awaited us, it was adding insult to injury when the worthy owner—a Frenchman—drove us into a large saloon sans everything, where he suggested a few beds and one basin might be transported. An exodus took place to other hotels, where quarters were secured.

At 10 P.M. the Admiral entered the ball-room, attended by a retinue of nearly thirty officers, all in full dress, for the President of Chile was present. The scene that met our eyes was astonishing! The market-

place had been converted into a palace, without a trace it could hereafter serve in any possible manner for the purpose it was built. The stalls were not to be seen, for they were boarded out so that the interior of the building was an uninterrupted square, and ornamented on a scale of unprecedented magnificence. splendid mirrors reflected the light, and gave an appearance of as many more rooms; under each a marble slab held bouquets of flowers, and dance programmes for those who required them. In one side of the square was an artificial cascade, with real water falling over rocks made natural in appearance by means of ferns and mosses. Opposite was an Arcadian grotto. Of the other two sides, one contained the entrance, and opposite was the supper-room passage, converted into a garden walk, lighted by Chinese lanterns interspersed amongst the evergreens.

In the middle of the room, which was covered by a handsome Brussels carpet, was a fine fountain, walled in by the choicest exotics, nestling in which were small statues, well executed in stone. On first arrival the room was comparatively empty, affording ample leisure for inspection; but soon more guests arrived, and dancing commenced. A good military band attended, and in the valses a pleasing novelty was introduced by a chorus of voices, boys and girls. At midnight there were about 2,000 people present; ladies decidedly in a majority. This was a mistake; nor did the stewards seek to partially remedy it by freely introducing our party, which formed a good

quota of dancing souls, but knew no one. Consequently, the first part of the evening was slow in the extreme. Bands of disconsolate officers wandered round, striving to look pleased, but failing in the attempt; seeking rest in different parts, but finding none; and feeling generally bored at the *rôle* of spectators. Supper was a relief, commencing about 1 A.M., and continuing till five. Our *maître d'hotel* had contracted to supply this for 2,000l.; but this part of the entertainment was a failure, owing to a faulty system employed. Severe criticisms were passed then and after upon the manner he had fulfilled his contract, for it was felt such a sum ought not to have left room for censure.

Towards morning the ball lost some of its stiffness, and officers were able to get partners. I have heard it was a matter of surprise to many charming señoritas that the majority of officers present danced so well, having previously been of an opinion that they were more adapted to, and found more pleasure in, the supper-room. That evening undeceived them; but such a belief is also no doubt common to many parts of England, where a naval officer is believed to be-on the authority of the novelists, such as Smollett—a frank, good-hearted fellow, who is always dancing hornpipes, singing ribald songs, occasionally getting drunk and shivering somebody's toplights, or referring to their eyes in an uncomplimentary manner. For these little defects ready excuse is found in his being a sailor. is to be hoped all may be undeceived some day, and a little more known about the navy and its feelings than at present. But to return to the ball, and linger one moment over an essential part—the ladies. Among such a number, it would be odd indeed were there not many fair; moreover, having in other parts of Chile observed that, as a rule, the female sex are small, here the reverse was noticeable, and there can be no doubt a true criterion only could be found in such an assembly as this. All were dressed in the height of fashion; indeed, Chile in that respect is a true index of Paris, and the display of jewellery would have eclipsed a Buckingham Palace levée.

Towards morning there was a general relaxing of demeanour, and many amusing anecdotes are told of the small hours when, in view of the approaching end, officers grew desperate in their endeavours to secure partners. But I have lingered here long enough. Suffice it to say the last dance took place about 6 A.M., when broad daylight glanced in on the remnant, reminding them that all things must come to an end, and, in the quiet contrast of a cool walk home, giving force to the utterance of Solomon that 'all is vanity.'

Several went back to Valparaiso that day, while others stayed to visit objects of interest in and about the city.

Santiago has been mentioned before in these pages, with a promise of speaking more hereafter concerning the government and internal economy of Chile. I will now endeavour to do so as briefly as possible.

It is too often the custom, especially with English-

men abroad, to compare this or that country or town with an ideal of their own, generally England; and in fault of seeing the same excellencies or habits, to believe no good can belong to this. Too often we forget that time only can build up a nation; can produce a standard, whether it be of manners, solidity, or civilisation. In England, France, or any other old country, there is a long experience to improve by; knowledge upon knowledge; there is an ancient lineage of glory, an unsullied name, to be preserved; and, lastly, the advantage of centuries of liberty and a hardy climate.

Thus comparison with a new régime is unfair; whilst at the same time a country starting now has not so many old prejudices to overcome. In Chile an impartial observer may note a theory of governing on pure principles, by those democratic notions which are so often apt, as evidenced of late years by Peru, to degenerate into serving personal ends and ambitions. The nation's patriotism can alone preserve it intact; and as that is intense in Chile, these ideas may, or may not, succeed.

One thing, no *new* country can be anything else but a republic. Here it is decidedly Conservative; but it presents the anomaly of complete individual liberty of vote, accompanied by a perceptible tyranny in the political world. As there are two parties, so the governing one often shows its displeasure upon those who favour their opponents. That is coercion in one shape, and must be rooted out before they can boast of perfect liberty.

The President of Chili holds office for five years, and cannot be eligible for re-election until five more have elapsed after his retirement. He is elected by the whole nation, and is assisted by two bodies, senators and deputies. Differing from the United States, here these bodies are unpaid, so that political life is not made a means of gross corruption, nor sought after as a livelihood.

There are twenty senators, chosen by special electors, who are named by the people in a number of three for each deputy. The period of office for senators is nine years.

Deputies are elected every three years by the people, in the proportion of one for every 20,000 inhabitants, or for a fractional part of that number not lower than 10,000.

The executive power is vested in the President and those men appointed by him to be Ministers, Councillors of State, Intendentes, Governors, &c. Congress authorises the expenditure of all moneys asked by the Executive for the public service; and, under the limit given by Congress, the Executive issues its orders and decrees, which are carried out by the different departments. Before any bill can become law it has to receive the sanction of both Houses and the Executive. Another important body is the Council of State. This, presided over by the President, is composed of the Ministers, two members of the Court of Justice, a high dignitary of the Church, a general or admiral, Chief of the Finance Department, two persons who have been

Ministers, Intendentes, Governors, or members of any municipality. This Council, among other attributes, decides the limit of power of different authorities, declares if there is sufficient warrant to enter criminal proceedings against Intendentes or Governors, and submits names to the President for judges, archbishops, and bishops.

Every town has an Intendente or Governor, according to its size. They derive their authority direct from the President, and in their district have almost unlimited power. This system of local government works most harmoniously. These magnates are generally men of wealth and education, just and upright in their dealings, so that an appeal against their decisions seldom takes place.

But in Santiago, as the capital, is centralised all higher authority and departmental offices. It is also the fashionable city par excellence, setting an example of luxury and indolence worthy of comparison with Paris. There is no law of primogeniture in Chile, consequently we see few young men embarking in lives of hardihood and toil. They are mostly content to wait and receive that share of the patrimony that must come to all. To enter the army would involve probably banishment to the frontier, keeping the Araucanians in check. The navy has not yet been popularized. Therefore nothing is befitting but to study for a barrister, so that a large majority become lawyers. Somehow they thrive, for going to law is a mania in this country. But the Santiago type loves best to

CH. XV.

stroll about with his eternal cigarette, an habitué of clubs, and generally one or two flirtations on hand. Not that all Chilenos are like this. In the country they are energetic and industrious; but a town within reach is not to be withstood.

And the fair sex. That is more delicate ground. But emancipate them from that fearful custom of being taught nothing but music and singing, and you will have a charming combination. To speak any language but their own cannot certainly be said to be the rule, even among the upper classes; while other branches of knowledge seem to be entirely ignored. How, then, can they be true companions to their husbands, to take an interest in his life and ideas? They show to better advantage as mothers, being very fond of their children, personally superintending the nursery, and being much with them. Consequently filial feeling is strong, and may be regarded as a marked trait in the young.

One great social blight that has often brought sorrow to a household is the unbounded influence possessed by the priests over women. Were these men generally well educated, cultivated men of piety, this influence might be beneficial. But, unfortunately, in many cases, they are not; often persuading women to hideous absurdities, and preventing complete confidence between man and wife. Many incidents of this might be adduced; one only, that convulsed Chile with indignation, will suffice. All may remember the burning of the church of La Campañia in 1863, when

2,000 women were the victims. But, in addition to the horrible details in which the priests came out so badly, it is not generally known that this congregation was formed of a society called 'Daughters of Mary.' It came out that the priest who established this society had actually made these poor women believe they could communicate by letter with the Virgin. For this purpose there was a post-box in the church, in which secretly they placed their letters, petitions, &c., accompanied by a golden stamp. This had been going on for a long time, and was only discovered when the church was burnt. The Society included nearly all the first families of Santiago, who, under priestly fear, kept this secret from every living soul. This instance of superstitious ignorance, were it not known as an historical fact, would not be believed possible; and it only took place ten years ago. The priest was never seen in Chile again after that night, for he would have received small mercy, such a fury was on the people.

That shook their power, and an improvement took place. But the fault appears to have been in allowing education to be so much carried out in religious establishments. The number of these in Santiago is astonishing; and, although free education is given to almost everybody, it would be better if their schools and seminaries were more secular and less monastic. Time only can modify this evil. Already church power has received many checks in its ultramontane doctrines. A great step was taken only a few months ago in this direction, when the Bishop of Concepcion refused to allow the body of a man who had bled for his country to be buried in consecrated ground because he had not led a religious life. The Intendente insisted on it, and forced its execution. Of course the matter was laid before the President, and shortly afterwards a decree was issued by which cemeteries were to be open to all denominations, having but one door for Roman Catholic and Protestant alike, while inside no division was to be made except by trees or shrubs.

This gave great offence to the Church, but it had to submit. So we see that momentous struggle between temporal and spiritual power extending to all parts of the world. By toleration and religious freedom alone history has proved that nations can prosper. Chile prosper? is the question one asks before taking leave of her. There is no reason why she should not, and every reason why she should. It was said by a great writer of the last century, 'Honour is the principle of monarchies, virtue of republics.' If each preserves its principle intact, prosperity is assured. Chile, though a republic, has not, like the United States, a prevalence of numbers over intellect and character; and where, by the working of the Constitution, the highest order of citizens, whether in character, property, birth, or intellect, is eliminated from the action of public life. Hence the prevalence of jobbery and corruption.

But here public life belongs to intellect and patriotism. Its short life of national independence has been one of advancement since the Spanish yoke was

thrown off; and, possessing a climate favourable to every industry, assisted by an infusion of Saxon energy and example, Chili will some day take a high rank amongst nations.

Let us now return to Valparaiso. It was on October 28, on a Sunday forenoon, that the long-talked-of 'Repulse' arrived. She appeared during the sermon, conspicuous to every eye, as she slowly glided past us, and anchored. The officiating minister, who was delivering one of his pet discourses, observed a compressed excitement all around him, but knew not the cause, only that it did not usually attend his efforts, so promptly gave the benediction. Who would reprove the inattention, save he who has not experienced the pleasure of seeing your relief after three years' exile on a foreign station? But in our joy was alloy, for the 'Scylla' had not arrived, and we had to wait for her.

In the interval we played our two last cricket-matches, being successful in both; then, unable to wait, on November 19 it was determined to proceed to Tomé, and remain there till news came of the 'Scylla's' arrival. So we bade adieu to Valparaiso, exchanging farewell cheers with all vessels in the bay; hardly able to realise we were leaving for all time, but hoping that hereafter, when 'absent friends' is the toast, some there may be who will find the name of 'Zealous' rise not unpleasantly in the memory.

## CHAPTER XVI.

NEWS OF THE 'SCYLLA'—LEAVE TOMÉ—COAL AT CORONEL—THE MINES
—LEAVE CORONEL—ANCHOR OFF MOCHA ISLAND—ENTER SMYTH'S
CHANNEL—ANCHOR IN CONNOR COVE—AN ADVENTURE ON THE MOUNTAIN—A PERILOUS DESCENT AND NARROW ESCAPE—VISITED BY TERRA
DEL FUEGIANS—CLOTHE THEM—A MIGHTY GLACIER—LEAVE CONNOR
COVE—THE ENGLISH NARROWS—DIFFICULTIES OF THE CHANNEL—ON
A ROCK—ANCHOR IN PORT GRAPPLER—PASS THROUGH GUIA NARROWS,
AND ANCHOR IN PUERTO BUENO HARBOUR—ANCHOR IN ISTHMUS BAY
—ARRIVE AT SANDY POINT—REMARKS ON THIS SETTLEMENT, PATAGONIANS AND TERRA DEL FUEGIANS—LEAVE SANDY POINT—ARRIVE
AT ST. HELENA, ASCENSION, MADEIRA, VIGO, AND ENGLAND.

It was whilst at Tomé, on December 2, that the welcome telegram came, telling us the 'Scylla' had arrived at Valparaiso. Accordingly, next day we left, making what might be considered a final start for England; though some months must elapse, and many stoppages be made, before that desirable haven could be reached. First of the latter was Coronel, thirty-five miles from Tomé, where we arrived the same day, in order to coal.

Coronel, a few years ago, was comparatively unknown; but discovery of extensive coal beds close to the water's edge has given it an importance which, there is every reason to believe, time will greatly augment.

On a small promontory, called 'Punta de Puchuco,' formed by the bay, is an extremely rich mine belong-

ing to the Company of Delano, Schwayer, &c. This important establishment employs 800 miners, working under the best English system.

In a depth of 120 feet five veins have been found, varying from one to five feet thick. According to the account of competent engineers, these contain 2,400,000 tons of coal, which would only last thirty years. But further exploration has caused the discovery that this stratum of coal extends in a longitudinal direction towards Lota, and therefore it may reasonably be presumed to last an unlimited number of years. The total monthly production of this mine is about 7,000 tons. During the year 1870, 269 cargoes were shipped; 129 in sailing ships, and the remainder in steamers.

A few miles along the beach we come to the town of Lota, which is a scene of great coal-mining operations, similar to Coronel, though on a larger scale; for the annual produce is about 100,000 tons.

The existence of coal here was known in 1825, but active working was not commenced till 1841. This establishment was founded by a Chilian gentleman, named Don Matias Cousiño. After his death his son came into possession, and sold it to a company for a million sterling, himself remaining one of the principal shareholders.

The town of Lota has little noteworthy about it, or inviting in its aspect. Miners, for the most part, occupy the dwellings. But these ports are destined to become the centre of a great commercial movement, which only lately has commenced. On the other hand,

that wonderful fecundity of soil in the interior—such a large portion of which is virgin of all cultivation, and lying waste from want of development—presents a vast field for foreign enterprise, the introduction of which should assure a brilliant future to a land so richly endowed by Providence.

We left Coronel on December 7; but finding progress much impeded by a heavy swell, with a light and unfavourable wind, took refuge under the lee of Mocha Island.

This is a small island, about twenty miles from the mainland of Valdivia. It has an inviting aspect from the sea, but we could not land on account of the heavy surf. Inspection showed excellent pasture land, close to the sea, extending about half a mile back. The island then suddenly rises to a height of about 2,000 feet, and this part is covered with a dense, impenetrable forest. A number of cattle dotted the plains, and several houses gave indications of a thriving colony. This island originally belonged to the Araucanian Indians; but they were driven out by the Spaniards, since when—like most of them—it has alternately been abandoned and reoccupied.

Left Mocha Island on December 10, but still found a southerly wind, so that it was necessary to stand out to the westward. This had a good effect; and, a calm succeeding, we steamed down towards the entrance of the Gulf of Penas.

This we entered on the evening of December 16,

and commenced the somewhat intricate passage called Smyth's Channel.

To such as have not experience of these parts it may be as well to explain, at the outset, that this is not the now well-known route of the Straits of Magellan. The west coast of Patagonia is peculiar in having a chain of islands from Terra del Fuego to Valdivia. Formerly all steamers passed straight through, and emerged into the Pacific—until very lately, few diverged from this track. But, later on, a passage was discovered between this belt of islands and the mainland, which only during the last few years has been rendered partially reliable by survey. By its use 400 miles of the open ocean are avoided, where generally tempestuous weather prevails.

But other considerations give it great interest for the traveller; such as exceeding beauty of scenery, and in several places a narrowness that lends excitement in proportion to the skill required or danger incurred. All this, added to the knowledge that our ship was the greatest in draught that had taken this route, had made this part of our journey anticipated with the keenest relish.

To describe the wonderful efforts of nature that have produced such a combination of gloom and grandeur would need the brush of an artist in continual use, to accompany a pen having a genius for appreciation and description of scenery. Possessing neither, I can only give plain facts, without ornament or exaggeration; painfully conscious that here exists

one of the most wonderful portions of the universe, though unable to show plainly in what it exists.

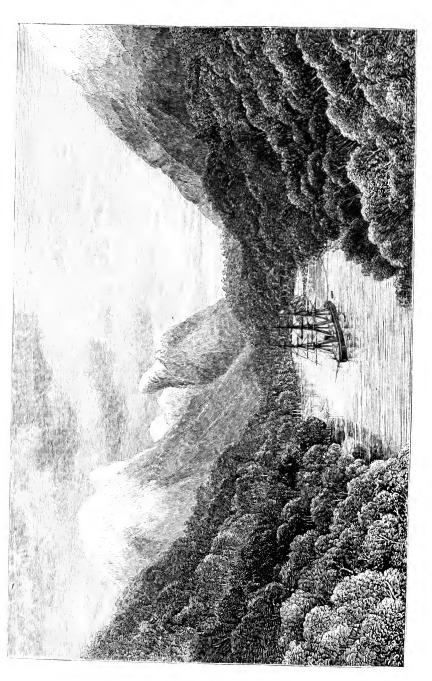
On entering Smyth's Channel—to speak generally, though only a small portion really bears that name—you at once pass from the turbulent forces of atmosphere and ocean into the stillness engendered by lofty mountains imprisoning a narrow belt of water. You glide onward, each mile having some distinctive feature, some fantastic mountainous shape that seems to say, 'We have our world, you have yours; not by chance are we thus.' On each side they rose up, often perpendicular, from the water, and nearly always covered with trees. Near the top they were bare, except a white covering of snow, which added to their beauty, while the summer sun caused continual melting and innumerable waterfalls.

Forty miles from the entrance we turned into about as small a natural harbour as it is possible to conceive, called Connor Cove. A narrow passage leads into a small basin, which, when we let our anchor go in the centre, appeared quite filled up. This is where we had determined to await the 'Scylla;' and our first manœuvre was to keep the ship in one position by securing her stern with a hawser to a tree. It was like coming upon a new world where man had not penetrated. Only a few sea-birds greeted us with strange cries, echoing from shore to shore. Mountains surrounded us of great height, covered with trees, till they disappeared from view, and only a white snowy surface remained. We saw the sun only for a short

time. Gales swept over our heads, and we felt them not. Parties landed, but could make no progress. It was one dense forest, with a false surface of fallen timber, leaves, &c. Woe to him who attempted to penetrate alone into the interior! To give some idea of the scenery and peculiarities around us, the following account of an excursion has been furnished. It shall speak for itself, simply remarking that the attempt caused some anxiety on board, and their return in safety was hailed with gladness:—

'From our snug little anchorage in Connor Cove we surveyed lofty snow-capped mountains, ravines, and forests that the eye could not penetrate. All who had landed testified to the almost impossibility of getting more than a few yards from the water's edge. Nevertheless, a party of five, consisting of A——, M——, B——, and myself, determined to make an ascent of one of these mountains to obtain a view of this unknown inland region of Patagonia. It might be one mass of lofty mountains, or innumerable islands, or, perchance, a chain of lakes. It was worth the attempt.

'Those mountains nearest the ship consisted of vertical walls of cliff, without a single irregularity to give any hope of ascent. But further back, one, between three and four thousand feet high, culminating in a smooth, snowy peak, seemed practicable, could we only reach the foot. We started, therefore, about 10 A.M., only taking a compass and a coil of rope, as the two most useful articles.





'It would be impossible to describe the density and silence of this woody region, where no human being apparently had set foot before, no woodman's axe resounded, not even the chirp of a bird, or sign of life of any sort. Silence and solitude reigned supreme.

'The first trees seemed to have fallen from age or wind, covering the ground with fallen timber. another generation seemed to have grown, only to fall in its turn across the others; and so on till the present Thus the surface was one mass of fallen timber, mostly rotten, with the spaces and holes filled up with a beautiful description of moss and small ferns. This treacherous surface constituted the difficulty of penetration. One step would be on firm ground; the next you would be on your nose, or sunk three or four feet in damp wood and moss. Persevering, however, after two hours' hard work we found ourselves on the verge of a precipice which separated us from the foot of the mountain, with a running stream at the bottom. How to descend was the question. It seemed hard to be repulsed after so much had been accomplished. Looking about, we observed a ledge running obliquely along the side of the precipice, which appeared practicable; so a fresh start was made. But about half-way down, with a wall of one hundred feet above, and another below, this ledge narrowed, and then disappeared altogether for about four feet, when it went on again. It must be passed; to turn back was almost worse. Making the rope fast to my body, and giving it to the others in case of slipping, I stepped across in safety. The others followed, and we went on with more rapid progress. We soon were at the bottom, and had crossed the stream, when something drew an exclamation of wonder from all. What was it? Where we stood the precipice was overhanging, and water dripped down on us in torrents. From the top, a green column, about eighty feet long and seven in diameter, was suspended, like a huge green icicle. Examining it narrowly we found it was solid moss, which had gradually accumulated in this manner. The effect was beautiful in the extreme. Who could tell how long it had taken to attain such a growth!

'We now found ourselves actually on the mountain, but, as it was getting late, pushed on rapidly. Walking here was comparatively easy over spongy moss, saturated with snow water, which fell in a multitude of cascades all over the side of the mountain. Soon all grass and moss were left behind, and snow appeared; first, in a melting state, and then in a more crisp and solid form, lying on an incline of 20° or 30°. Here the glare was very trying, producing giddiness, headache, and altogether a most unpleasant sensation.

'At last the incline became greater, even to 45° and 50°, with a vast, smooth surface of deep snow. From this point commenced the hardest work of all. Already a great height had been attained, from whence we had a magnificent view of all the windings and turnings in Smyth's Channel; its lonely, secluded little harbours and inlets; its mountains and thickly-wooded shores. But we wished to view the other side of the picture—

that mysterious inland region with its mighty glaciers. So we struck up again, knee-deep in snow, continually slipping down one foot in two. Soon we came to a stop, having arrived at a deep chasm, about two feet broad, which separated us from the next ridge. Looking down, it was apparently of great depth, and the highway to a mighty precipice if you fell. That we got over, and how, will ever remain a wonder to us all; but it was accomplished, and we again scrambled on.

'Another hundred yards of steep snow, over one or two rocky ridges and boulders, and we were on the top. But, oh! hard fate after this tremendous struggle, there was no reward. A fierce snow-storm raged, which shut out all view—even ourselves from each other. Enormous flakes, as large as an egg, came thick, and soon made us as white as the ground we stood on. That it was probably always snowing up here for the same reason that it was always raining in the Straits, had not entered into our calculations, and it caused a bitter disappointment. It was now 4.30 P.M., so we sat down to lunch; and never starving beggar enjoyed a meal with keener relish than we our sandwiches, reduced now to pulp, though originally salt horse entered largely into their composition. Five minutes' rest, and the warmth and excitement subsided. Thoughts of being overpowered with drowsiness and giddiness made us feel a descent must at once be made: so a start down was commenced, and the first large snow-bank soon arrived at. Seized with an idea, I said, "This will be the shortest way down here;" and, suiting the action to the word, jumped into the snow, and slid down on my back.

'But I soon found this was a faster way than pleasant, and that the whole surface of snow was sliding down too. My velocity increasing rapidly, I firmly planted heels and elbows in the snow; but it had no effect, and to stop was impossible. An unpleasant sensation arose. On I went till the rocky ridge came in sight, on the other side of which I knew the gaping chasm to be. To describe one's feelings would be impossible; but an instinct of self-preservation made me again desperately cling to the snow, tooth and nail. It was of no avail, and the end appeared near.

'It was a fearful moment. On I went with great velocity. The ridge came—oh, fortunate ridge! it did not stop me, for I shot clean over into space the other side and over the chasm, alighting at least three feet beyond. Here was one danger past; but now I could see my descent had been deflected from the path of our ascent; and just in front, where the snow ceased, was a sheer descent of hundreds of feet. Furious with despair, I plunged both arms into the snow and stiffened every limb. Thanks to a merciful Providence I brought up just in time, within a few feet of the precipice. Turning, to look for my companions, there they were, tumbling, rolling over, and bowling along towards me. I shouted out to them to stop or they would be over the precipice; which they succeeded in doing, all but B——. He could not, apparently, and seemed bound for space, when I rolled over and

caught him just in time by the leg. It was, indeed, a narrow escape, and we could hardly speak for some moments.

'From this, our journey down was much easier, finding our rope of great assistance, lowering ourselves down steep places, and from tree to tree. It was about 8.30 P.M. when we arrived, much exhausted, on the beach, close to our ship. Our appearance on board was ludicrous in the extreme, for our garments had become reduced to a few rags.'

The night of our arrival in Connor Cove we were visited by a canoe load of Terra del Fuegians, two men and three women. If Darwin had not seen the Digger Indians when he voyaged in the 'Beagle,' his ideas of man in connection with animals might certainly have originated here. It would be difficult to imagine a lower scale of civilisation than is exhibited by these denizens of the straits. Their clothing is of the scantiest nature; in the men it consisted of a shirt, though that is of late introduction. The women, however, had not so much; nothing, in fact, save a piece of skin hanging down their backs, whilst they squatted in the canoe like so many monkeys. A very ridiculous sight was, when a pair of marine's trousers was handed to a hideous old woman of ourang-outang appearance. She took the pair, and stood up to put them on. She was short and fat, but scorned to turn her back on the audience. The trousers were evidently a puzzle. First her arms went through; but that was evidently not their purpose—it must be the legs. So, on they

went, but wrong side foremost; all this time with a most comically grave face. Roars of laughter greeted her efforts, but without disconcerting her. When her feet came through the other end, she resumed her seat without further attempt to pull them up. Her companions then went through the same manœuvre. With difficulty the men were enticed inboard, and appeared in great fear the whole time, shaking and keeping up a continual howl. Biscuit and tobacco one clutched with avidity; but, when shown a looking-glass, exhibited unmistakeable signs of aversion, and spat at his own reflection. He had probably never seen his own face before, and was astonished at its ugliness. These men were short, but not badly made, and of a copper colour. One had several marks of wounds about the head and chest. Him they put on a marine's red jacket, and trousers to match. A Lincoln and Bennett completed his costume. The metamorphosis was ridiculous in the extreme.

These are neither Patagonians nor bonâ fide Fuegians. They appear to be a corruption of the latter, or a species of Fish Indian, similar to the Vancouver Siwash. One of their peculiarities, not often encountered in the red man, is their abhorrence of spirituous liquids. It has been remarked on before, and we found a similar effect. On offering these men rum, it was easy to see, though pretending to drink for fear of offending, that nothing went down. The Patagonian, a far nobler specimen of savagery, will do anything for drink; and may be these also, after being brought in contact a

little more with civilisation, will not show any repugnance to the bottle.

Perhaps one of the most wonderful traits connected with this part of the world are the mighty glaciers with which it abounds. So we took advantage of our stay at Connor Cove to get the steam-launch out and pay one a visit some ten miles distant. Accordingly, a large party, including the writer, started early one morning.

For some fifteen miles our course lay down the main channel, passing small islands, bays, and rocky mountains, till, coming to an opening, we saw the first indications of ice floating past. The scenery at this point commenced to be grand and picturesque, though gloomy in its solitude. On each side precipitous mountains rose perpendicular from the water, like a wall, 2,000 or 3,000 feet high. In some places they were overhanging; any ship might have steamed up with sides touching, but for masts and yards. Trees grew on the bare rock down to the water's edge, many of great size. In other places perpetual damp had favoured the growth of moss, to a depth of three or four feet, of many species and colours.

The channel then became narrower, so that, when a sharp turn was made to the right, mountains on each side appeared to join and enclose us in a lake. At the same time we came in sight of the glacier.

It was, indeed, a wonderful sight. From there it appeared as a high wall of ice, but jagged at the top by myriads of pinnacles, its snowy whiteness standing

out in striking contrast with the dark mountains on each side. The floating ice here began to get thick, and we could see a vast floating mass for two or three miles in front of the glacier.

Through this we slowly pushed our way. The pieces assumed all shapes and sizes, some thirty feet high, of a beautiful light-blue colour, showing that a large portion of the glacier had here fallen away.

Approaching within a mile, we could see this glacier was an enormous floating iceberg, formed into mountains and ravines of ice. The extreme left went up perpendicular from the water, like a church steeple, and from thence it extended to the right for miles, though that extremity was hid from our view by a mountainous island. Our progress now got slower, and we were at last brought to a dead stop by huge blocks of ice on all sides. Pushing to the nearest bank, we landed. Not a living thing was to be seen. It might have been the North Pole in its solitary grandeur. From an eminence we observed that the other side of the bay was clearer of ice; so struggled across, and found a channel by which a nearer approach was made.

When within about half a mile no further progress could be made; so another landing was effected, and a magnificent view rewarded a heavy climb over wet and slippery moss. From our elevation we could see the top of the glacier went back for miles, gradually ascending towards those high mountains from which it must derive a continual flow of ice.

The water at the foot is ever sapping its foundation, while the ice in rear pushing onwards also assists in displacing centres of gravity and detaching large masses from the main bulk. Thus a continual action is at work, causing that vast field of ice through which we had such difficulty in pushing our way. From our position this was palpable. At intervals a loud roar was heard as the ice cracked and broke off in front from the pressure behind. A louder report than usual drew all our attentions, and then we saw the left extremity suddenly detach itself from the main body, topple over, and fall into the water. A cloud of spray hid that part for some time, and shortly afterwards a wave passed over the whole ice-bound surface at our feet. It would be impossible to estimate the volume of that portion which fell, though it did not appear to alter the general configuration.

Another attempt to approach nearer proved abortive, though close to us, apparently, was clear water, and what we took to be a cave in the centre. Thus we could not determine its exact limits, and were obliged to retrace our steps, for darkness was coming on. It had poured with rain the whole time; so all were glad to get on board, though none would have missed seeing such a wonderful sight. It might justly be placed in the same rank of wonders as Niagara and but a few others.

When the cause of any known fact cannot be determined, it is impossible to quote precedent as proof; at any rate, it is very liable to be erroneous. Here we

have, undoubtedly, a glacier out of the common, both in magnitude and modus operandi. The common acceptation of the term is, we know, a field or immense mass of ice formed in valleys or on the sides of mountains; whilst in geology the glacier theory is, that ages ago there was an ice period throughout the globe, when vast masses of rock, &c., were transported on islands of ice to their present locality. That theory may be dispensed with here, and, in a combination of both mountains and valleys, find an explanation of this accumulation. But it must be on a scale of unprecedented magnitude, the ice finding here a channel from ranges of high mountains many miles inland. To penetrate to those parts, and ascertain where it originates and how it proceeds, would be an interesting field of discovery, and probably reveal many mighty mysteries.

The appearance of the 'Scylla' on December 21 brought an end to that delay and enforced idleness which had been our portion for some time. It was a most welcome sight, for from this moment might our passage home be said to commence.

We started together the next morning, and a few hours' steaming brought us off the entrance of the English Narrows. It is this portion that constitutes the only difficulty of Smyth's Channel. Here it is considerably narrowed, while an island in the middle obliges almost a complete circle to be made in a very small space. We were not destined to emerge unscathed, notwithstanding that every precaution was

taken. To a spectator it would almost appear impossible for a ship of any length to combine sufficient speed to give accurate steering, and at the same time proceed with due caution in so narrow a spot. Again, this part is subject to a variety of tide influences which are difficult to balance; and so a time of nearly low or high water is best, according to whichever way you are going. It was nearly low water in our case, and all went well. The circuit of Midchannel Island was made without difficulty, and we once more saw before us the long, straight course of the channel. But congratulations were premature, for at that moment a fierce eddy tide on the right hand took command, and rapidly swept us towards the opposite shore. It was curious to observe how powerless we were in its hands: the rudder had no influence; astern were similar dangers. It appeared certain destruction. As an only resource orders were given to go astern. But just as all felt a curious sensation of an impending shock, the enemy relaxed his hold, and the rudder began to exert a beneficial influence. Our head was again towards the centre, and slowly we turned in a right direction. Less than a minute was sufficient to allow these occurrences to take place. Another minute, and a slight motion was felt, and we came to a stop. We were aground. Where, it was difficult at first to say, for by the chart all was clear. Not so under the bows, for there plainly was a flat rock sloping towards the shore; but so easily had we struck that few were aware of the fact, while others judged us to be

grounded astern, which was close to a small island. In the meantime the 'Scylla' passed at full speed, warned by our disaster, and thus able to avoid a repetition. We watched them enviously; for who could say what our fate might be!

Fortunately, we found deep water under the stern, and our slow rate at the time of striking at once gave hopes of extrication. All hands were ordered aft, and engines to go astern full speed. It was with inexpressible relief we saw her glide off her temporary restingplace, and get out of this unpleasant locality; not wishing to perform the part of another 'Conqueror' in such an inhospitable region. That evening we anchored in Port Grappler, and examined, by means of a diver, what damage was done to our bows. It was less than all anticipated, though sufficient to cause a con-This harbour has little remarkable siderable leak. about it, beyond a certain grandeur of wild scenery. It is enclosed by lofty mountains, with several extinct craters in the vicinity. These appear to be of recent date, judging by their charred sides and want of vegetation.

Left this anchorage the next morning, and, with the 'Scylla,' proceeded on our way. This day we passed through the Guia Narrows, a part where the channel is narrowed to a breadth of about two cables. These do not present any difficulties, having nearly a straight course, without such strong tide eddies as in English Narrows. Anchored that evening in Puerto Bueno Harbour. Close to is a large lake, reputed to teem

with wild fowl. On this occasion many guns visited it, but without much success. Considering how little such a place must be visited, it is curious to remark such an absence of animal life. But one of the most striking features of these Straits is that want of life, human or otherwise, cultivation, or habitation, to vary a continual succession of lofty mountains and snowy peaks.

It was on December 24 that we left Puerto Bueno Harbour, and anchored that evening in Isthmus Bay. Our fourth Christmas Day abroad was passed in this haven, as cheerfully as circumstances would permit. But Isthmus Bay, though an excellent anchorage for small ships, has somewhat too irregular a bottom for a large ship; and too many rocks in various parts, which contract in a great degree the whole area. Consequently, during the afternoon, we found it necessary to shift our quarters, and go through intricate evolutions before we could at last find a suitable anchorage. We were not sorry, therefore, to take our departure next day, and before noon had emerged out of Smyth's Channel into the Straits of Magellan. Here, in the distance, we again saw the Pacific Ocean for the last time, with Cape Pillar majestically marking the western entrance. All was now plain sailing; at 10 P.M. we rounded Cape Froward—our lowest point of south latitude—and the following morning, December 27, at 6 A.M., anchored at Sandy Point.

This small settlement, situated on the Brunswick Peninsula, near the east entrance of the Straits of

Magellan, was selected by the Chilian Government some years ago as a penal colony. It is still used for that purpose, though not for great criminals, most being thieves and deserters. Beyond an enforced stay, and certain work to perform—such as coaling ships, making roads, &c .- their punishment is not severe. Under the energetic governorship of Señor Oscar Viel, Sandy Point bids fair to become an important settlement. More especially does this seem likely since the discovery of coal. According to the opinion of many geologists, the whole Magellan territory is carboniferous. Certainly, many mountains in Smyth's Channel bear strong evidences that coal is there in large quantities. It seems simply to be the continuation of a stratum which extends from north to south in both continents. Cultivation often brings it to light, as well as accidental discovery. Coal-beds have been mentioned at Coronel; it has been discovered in several places near Tomé and Concepcion; while, in the north, coal from Vancouver Island will probably supply the Pacific slope till a new vein is struck in California. It may safely be inferred, then, that, as fast as one locality is exhausted, there will be another to take its place.

Since 1870 a mine has been worked near Sandy Point, and a great deal of coal extracted. Being surface coal it is not of superior quality; but the vein is nine feet thick, and should in time produce much better. Nearly all steamers now stop to take in a supply; but as Sandy Point is an open roadstead, without any pier, coaling is a tedious business. Landing

also is not without its discomforts when a surf sets in, at which time—if there is any wind, and a low tide boats are prevented from nearing the shore. Patagonians arrive periodically at the settlement, bringing guanaco, fox, and ostrich skins, which they exchange for provisions, spirits, guns, and silver dollars. This is the only shape in which they take money, not caring for gold, as all their ornaments they make of silver. These Indians hunt on the plains between Magellan's Straits and the river Negro, three hundred miles north of Sandy Point. Many wrong ideas concerning these Indians have been corrected by Captain Musters, R.N., who spent eighteen months amongst them. Thus, they must not be confounded with the Araucanians, being a distinct race. Their nature is restless, and hunting their sole occupation. Neither do they own the same allegiance to Caciques or chiefs; only rendering a voluntary obedience to some elected head when making one of their long journeys. Their religion is more negative than positive. They have a hazy idea of a great and good spirit who created all things; but ever in their minds an evil spirit—Gualichu—is uppermost. They believe him always on the watch to do harm, but that the medicine-man has power to keep him quiet; while in the custom of slaughtering mares on an accident—such as injury to a child—it would simply appear to be a propitiation.

During our stay at Sandy Point only three made their appearance. These were an old chief, called Casimiro, his son, and the latter's wife. The former is a fine specimen of an Indian, frequently mentioned by Musters. In fact, this chief seemed to be under the impression that his old companion had arrived, having —so he said—promised to meet him at Sandy Point in two years' time. On hearing an English man-of-war had come, he immediately hastened in, and seemed greatly disappointed not to find Musters.

His son and daughter-in-law paid us a visit on board. They were fine children of sixteen and four-teen respectively. Both were covered by an ample guanaco robe, with high boots of the same skin. They were copper-coloured, with broad faces and high cheek bones peculiar to the Indian race; but an intelligent expression of countenance, which, in the woman, a look of amiability and good humour rendered positively pleasing. This race is decreasing annually, more by the effects of drink and disease than from internal quarrels, though they are numerous.

On the opposite side of the Straits we saw large clouds of smoke, pointing out where the natives of Terra del Fuego were gathered together to celebrate some of their unholy rites. But they never come across, nor do others feel disposed to visit them. It is one of the few places where cannibalism still reigns, and which white men have not yet influenced. Woe to the unlucky mariner, if cast away on that inhospitable shore! We heard of a ship wrecked there not long ago, and all the crew eaten. A boat drifted over there with two men—they have not turned up again! It is time that something was done to remedy this

extraordinary relic of barbarity in the very highway. For a sailor, the chance of shipwreck is sufficiently unpleasant to contemplate, without that of serving as a bon bouche to a hungry Fuegian being added.

About fifteen miles from Sandy Point excellent shooting can be obtained in December and January on Elizabeth Island. Wild geese and duck flock there by thousands to breed; choosing this spot in preference to the main land, to avoid the foxes, which destroy their young. Wild swans breed there also in November. A large party went there from the ship in the steam launch, and succeeded in bringing back 130 geese, twelve brace of duck, and a similar quantity of snipe. The young birds were just beginning to take care of themselves, but a month later there would have been good flapper-shooting.

The 'Scylla' left us on December 30, to go to the Falkland Islands for provisions. From thence she was to meet us at a 'rendezvous' in lat. 45° 20' S., and long. 50° W. On January 4, 1873, having taken in 400 tons of coal, we also left Sandy Point, and at 2 A.M. the following morning were once more in the Atlantic, bound for St. Helena, our first stoppage.

The rendezvous was reached on the 11th, and the 'Scylla' found awaiting us; then both proceeded together, before a strong westerly wind, which enabled us to make our greatest run during the commission, viz., 218 miles. But on the 18th, it increased to a gale; and that night the 'Scylla' parted company. About noon next day the wind abated, leaving only a

heavy swell. For some days afterwards every sail sighted was expected to be our missing convoy. But she did not turn up again, and we had to make for another rendezvous given in case of such a contretemps. This was in lat. 30° S., and long. 8° W. Here we found her on the 27th. She was then ordered to make the best of her way to St. Helena, and await us there. We sighted St. Helena at noon on February 5, and anchored at 9 P.M., after a passage of thirty-two days from Sandy Point, and, by our track, a distance of 4,292 miles. Here we found the 'Scylla' and 'Sylvia,' with letters that had been awaiting us for months.

Who has not been to St. Helena, or, at any rate, read of it? 'There is no new thing under the sun,' said the wisest of men. Is it possible to say anything new of St. Helena? Hardly. Let us not pass by this historical spot, however, without a few words, since we have not done so to less celebrated places.

It would be hardly possible to find a more barren aspect than that which St. Helena presents from the sea. From the anchorage it appears as a huge mound of earth, without a blade of grass on its nearly perpendicular sides. The town is built in a narrow valley, certainly clean, and was at one time in a very prosperous state. But the Suez Canal has diverted the track of many vessels which would otherwise call here. Shipping entries being thus considerably reduced, it brings a serious change to the island, which, of course, depends upon vessels as a chief means of support. Now—though all produce will grow abundantly, espe-

327

cially vegetables—there is no market, and cattle only reap the benefit. To remedy this evil, a scheme is about to be tried of introducing foreign capital to work certain lands, and export the produce. He who has visited St. Helena will probably remember with commiseration the horse that carried him to Longwood. That proverbial dog, which was so thin that he had to lean against a lamp-post to bark, was corpulent compared to these animals. From the rugged outline, they were evidently of volcanic structure; though claimed by a precocious horde of small fry, who follow, hanging on to their tails, to be of Arab descent, or gifted with great powers of speed. It was with many misgivings a party of us selected the likeliest, and started off for that neighbourhood where Napoleon spent six dreary years. After getting out of the valley to a higher region, it was a pleasant change to meet a fresh breeze which always blows, and on all sides profuse vegetation. About a mile and a half this side of Longwood you descend to a green spot where Napoleon was buried. This was a favourite resort in his lifetime, where he would come and read, and drink of a pure spring close by. According to his own wish, he was buried here without any ornamental tomb, or even an inscription-simply a flat stone, enclosed by iron railings, and surrounded by a few trees. But there is a quiet beauty about the spot, from which it is quite possible to understand his desire to rest there. In his wish for no inscription, it is more difficult to penetrate the motive. Either he wished to

bury that part of his life relating to St. Helena as much as possible, or else he felt his name would live equally in the future without gilt or marble. The tomb is kept in good order by a French sergeant, who has lived there for fourteen years, and seems, by the connection, to believe in everything that is associated with the name of Napoleon, past and present.

Riding on, we soon came to Longwood, a plain house, standing on a hill overlooking the sea. Except that it is perfectly empty, no alteration has been made since that time. There are seven rooms. In the one where he died the spot has been railed off, and here is placed an excellent bust, from a likeness taken just after he died. Other rooms are identified by a certain pattern of papering. Close by is another house built for him, but which he did not care to go into, preferring to remain where he was till death intervened.

Walking through these rooms, and over that ground where he spent those years of imprisonment, thoughts arise in the mind of that extraordinary career of energy, ambition, and glory, which had such an unhappy ending. No wonder life became insupportable, and death a relief. In the interval what a mass of hopeless regrets! what material for an autobiography! and he died, and left no sign. The concluding chapters would have been too hard to pen. Great though his crimes, great though the misery he inflicted upon thousands, and though his bondage brought peace to the world, one cannot withhold a deep feeling of sympathy for him who achieved such great deeds; but,

in taking the maxim 'Aut Cæsar, aut nullus' as his motto, he attained the first part only that the second might be a greater punishment.

We left St. Helena on February 9, and arrived at Ascension on the 16th, having had extremely light winds the whole time.

If an accusation of being the last place created can convey any idea of extreme unpleasantness, Ascension might claim that honour; while, in many cases, the saying is rendered less of a paradox by knowing that several of these volcanic islands are of comparatively recent appearance. We have no knowledge of Ascension anterior to the year 1500, so cannot say its exact age; but the lower part has many peculiarities, and is entirely devoid of vegetation. This is not relieved by those few stiff-looking, yellow-washed buildings, constituting the dockyard and only habitations. Unfortunate mortals who are doomed to a three-years stay! No other nation would have kept such a place with an island like St. Helena close by. Yet, forsooth, vessels on the west coast of Africa do not despise Ascension, when compared to that Slough of Despond. We found a gun-boat, called the 'Coquette,' just arrived from the coast. Certainly they had forty-five men out of sixty down with fever, and had to be towed across, not having enough available men. But in such a case there is a redeeming point here, and that is Green Mountain. On the top is a well-kept hospital, and an entirely different climate. Grass, green trees, and a healthy diet soon bring back strength to the debilitated frame. Without this resort the island would not be bearable; a fitting commentary on that life where common necessaries are regarded as the greatest But Ascension has one peculiarity well luxuries. worth a visit, and that is Wide-a-Wake fair—not a gathering of men and women, but birds. It is about three miles from the dockyard, and a hotter walk it would be difficult to find; over a vast plain of scoriated lava, as if the whole world had made this their ashpit. The road is marked by empty bottles, which speak volumes. On an open spot, on rock, on sand, as thick as possible, are congregated millions of these birds. The ground and air is literally alive, so that you cannot advance without treading on their eggs or young. It is necessary to keep a stick in continual motion over your head to ward them off. This bird is a species of sea-swallow, about the size of a pigeon. An extraordinary trait is the faculty old birds have of knowing their own offspring and eggs among this countless horde after returning with food, even if either are moved. Altogether, this is one of those wonderful sights which must be seen to be fully believed.

Having taken in 300 tons of coal and a few turtle, we left Ascension on February 20 for St. Vincent, in the Cape de Verde Islands.

The equator was crossed on the 24th, and for ten days most unpleasant weather was experienced; not a breath of wind to relieve an overpowering heat. Just as our stock of coal was rapidly coming to a close, and perplexing doubts arose, a breeze came which carried us towards St. Vincent, but not sufficiently fair to reach. We should pass to leeward, and have difficulty in getting there at all.

Porto Praya, in the island of St. Jago, was our only refuge; so, accordingly, we steamed up, and anchored there on March 7. Fortunately, coal was obtainable here. Live stock was also plentiful, and moderate in price. On this island are great numbers of quail and guinea-fowl; but the latter are difficult to shoot, owing to the speed at which they run when seeing anything in the distance; only a greyhound could overtake them.

Leaving Porto Praya on March 10, we arrived at St. Vincent the next evening. Remaining there only two days, sufficient to take in 500 tons of coal, on the 13th we continued our journey towards Madeira, where, after a favourable passage, we arrived on the 23rd.

When we left Madeira on the afternoon of the 26th, England, for the first time, appeared near, and all anticipated a speedy arrival. But, remaining unto the end victims of a persistent ill-fate, we were not destined to arrive without once more being conquered by the elements. Creeping up the Portuguese coast, past Lisbon, with thanksgiving, until within seventy miles of Vigo, we found ourselves buffeting against a strong north-east wind, unable to make any progress. Four days under sail sufficed to make us describe an irregular quadrilateral, and then return to much the

same spot from which we started. Wind and weather remaining as obstinate as ever, there was no help but to put into Vigo for coal. Accordingly, we anchored there on the 6th, with many lamentations over our luck.

If all Spanish towns are like Vigo, I have no hesitation in saying that Spain is as much behind Chile in all domestic arrangements and ideas of cleanliness as the latter country is behind England. Seeing how Spain seems quite unable to advance with the age, and conform to changes that belong to the world's progress, one can no longer wonder at her inability to keep a single colony, and that deep decline which she seems to have fallen into and which is rapidly bearing her on to an ignominious grave.

Left Vigo on the 7th, after taking in 150 tons of coal, and steamed steadily towards England. Our progress was slow, as a head wind still prevailed, but we managed to creep on at the rate of eighty or ninety miles a day, anxious unto the end lest our coal should fail. When within 300 miles of Plymouth a gladful calm succeeded, so that better progress was made. The Eddystone was sighted on the afternoon of the 12th, and we anchored in Plymouth Sound that evening, after an absence of three years and five months.

## CONCLUSION.

WITH our arrival in England comes to an end this volume, which has engaged the attention of many leisure hours, and afforded some amusement in the past. May it also serve as a connecting link in the future! Then, as years roll by, and we are separated by the inexorable demands of duty, this will recall a time which, if not altogether one of unalloyed pleasure, had, in many respects, the elements of happiness strengthened by a mutual friendship, which no trying ordeal could weaken.

Let it go forth, then, a token of our goodwill, and soften the asperities of a long farewell; for

We only meet on earth
That we may know how sad it is to part:
And sad indeed it were, if in the heart
There were no store reserved against a dearth;
No calm Elysium for departed mirth,
Haunted by gentle shadows of past pleasure,
Where the sweet folly, the light-footed measure,
And graver trifles of the shining hearth,
Live in their own dear image.

## APPENDIX.

## APPENDIX TO CHAPTER III.

General Remarks on the Passage from Panama to San Francisco and to Vancouver Island, as to Winds, Weather, Currents, &c.—Remarks on the Harbours of San Francisco and Esquimalt. By Captain Francis A. Hume, Staff Commander J. T. Gravener, and Navigating Lieutenant Thomas H. Hayman.

WE found H.M.S. 'Zealous' at anchor in Panama Road, about three miles off shore. After getting on board all our baggage, &c., steamed over to Taboga Island to coal. This island lies nine miles to the southward of Panama, and has a considerable dirty village on its north-east side. The Morro is a small hill, connected with the mainland by a low sandy isthmus, covered at high water, and was formerly the headquarters of the Pacific Mail Company; now at Callao. The anchorage is good, and close to the shore. Supplies for a sea cruise very difficult to obtain; and the water (owing, probably, to the dirty tanks in which it is kept) not good.

After leaving Taboga, had very light variable wind, and calms to the Galapagos Islands, which we sighted on the afternoon of February 3. Passed between Chatham and Barrington Islands during the night, having a north-westerly current of  $1\frac{1}{2}$  knot per hour with us, and anchored in Post Office Bay, Charles Island, at 10 A.M. February 4. There is good anchorage in this bay in from 6 to 10 fathoms: it abounds in fish of all descriptions; but there are no terrapin here. To reach the 'settlement' it is necessary to go round

to Black Beach Road on the west side of the island, a distance of about five miles from Post Office Bay. From the Galapagos steamed to the southward, about 80 miles; then made sail to a very light S.W. breeze; but for a whole week experienced most vexatious weather, having very light southerly airs and calms, accompanied with passing showers, and generally dull, muggy weather. Provisions for 38 days only on board, and only sufficient coal to take us through the Doldrums when we cross the line. However, with the aid of favourable currents, &c., we gradually drifted away to the W.S.W., and eventually got into a steady but light south-east trade-wind, and fine clear weather. February 22 crossed the equator in long. 109° W. and from thence until the 28th had calms and light, variable airs, with most unpleasant, dirty weather. We steamed for 30 hours, all we could afford to do, and after that lay rolling about becalmed 'like a painted ship upon a painted ocean,' until at last we drifted into the north-east trade-wind in lat. 4° 40′ N.

Between the parallel of 2° and 3° N. found the equatorial current very strong, it having set us, west, 111 miles in two days. We found the N.E. trade fresh, with oftentimes a confused sea, and occasionally squally weather; but the good ship, stiff and easy under it-current generally setting to the southward about 16 miles in the 24 hours—on the night of March 11 passed over the position assigned to an island (?) in lat. 22° 37' N. and long. 131° 24′ W.; but saw nothing of it, therefore can positively say an island does not exists in this position. We lost the N.E. trade-wind in lat. 27° N., and from thence until within 100 miles of San Francisco had variable winds. sometimes fair, sometimes foul, but principally from the N.W.—weather very changeable. On March 26, when about 130 miles from San Francisco, the wind freshened into a moderate N.W. gale, and headed us off our course; so that, what with a southerly current and leeway, we

were unable to fetch up to our port. We sighted the S. Farallon Light that night, but had not sufficient coal on board to steam against the breeze. Fortunately, during the next night the wind fell, and by 7 A.M. the following morning it was a dead calm; so that by carefully 'husbanding' the coal we had just sufficient to take us into San Francisco harbour by 3 P.M., March 28, having been 60 days from Panama, and without seeing one friendly sail the whole time.

San Francisco Bay-on the west side of which is the city of San Francisco—affords one of the finest harbours in the world; certainly, the best on the Pacific coast, both as regards its geographical position, size, and depth of water, and where unlimited supplies of all descriptions may be obtained at reasonable rates. The bay is about 30 miles long in a N.W. and S.E. direction, and, abreast of the city, about four miles wide; but is very shoal in its S.E. and E. parts. The only drawback to San Francisco harbour for heavy draught ships is the Bar, a bank of sand with an average depth of five fathoms water over it, lying about five miles outside the entrance to the harbour. generally a considerable swell on it, and during, or after, strong S.E. winds, the sea breaks heavily upon it. Every vessel bound into the harbour must either pass over it or enter by a rather intricate (on account of the strong tides off Bonita Point) and rarely used channel to the northward of it.

The Golden Gate, or entrance, is well described by Professor Davidson, U.S. navy, 'as presenting the appearance of a great cleft or fissure in the sea-coast range of mountains.' Between Bonita and Lobos Points it is about two miles wide, contracting to three quarters of a mile between Lime and Fort Points. Both shores are bold and high, especially the northern side, rising to a height of 1,800 or 2,000 feet; deep water in the channel (30 to 60 fathoms), and the tides strong. We could scarcely make headway against the ebb, though going from  $5\frac{1}{2}$  to 6 knots. Immediately after pass-

ing Fort Point the city opens out to view on your right hand, whilst on your left is the strongly fortified island of Alcatraz, also Yerba Buena Island. The shipping are generally moored alongside extensive well-built wharves; but there is first-rate anchorage for any number of ships in 9 to 12 fathoms everywhere abreast of the city. The only hidden danger—the Blossom Rock—has now been removed by blasting, and 24 feet is the least water over this spot. Good water is supplied to ships at one dollar and a half per ton. Coal can also be had in any quantities, costing, according to quality, from eight to fifteen dollars per ton. The markets are well supplied with all the necessaries of life; and, during the season, fruit of all descriptions, peaches especially, are both abundant and cheap. Washing, which forms a considerable item in one's expenditure in the Pacific, is moderate compared to other places on the north and south coasts, being one dollar and a half per dozen. There is a very fine dry dock at Hunter's Point (four miles from the city), excavated out of the solid rock, and capable of taking in ships drawing 22 feet of water, though, owing to the high price of labour, &c., refitting and repairing ships here must be rather a costly affair.

About four miles across the bay, opposite San Francisco, is the city of Oaklands, fast rising into importance, being the terminus of the Pacific Railway from New York, and the favourite abode of many of the city merchants. Owing to the bay being very shallow this side, a very long pier, or wharf, has been built out, stretching one-third across the bay towards San Francisco, to which ships moor, and load with the produce of the surrounding country brought alongside of them by the trucks of the Pacific Railroad, whose lines extend to the pier end. The principal exports from California are corn, hides, flour, wool, quicksilver, gold, and silver. Comfortable ferry-boats run frequently to and fro between the two cities, connecting with all the trains. An additional advantage coming to a good port like this is the quick com-

munication with Europe, both by telegraph and post; a letter only taking nineteen days in transit, while a telegram can be received at San Francisco before the time it actually left England, owing to the different longitude of the places, 8h. 9m. 37s. in time slow of Greenwich.

During the dry or summer months in San Francisco the wind generally blows very strong from the N.W. in the day-time, stirring up clouds of dust and making it unpleasant to walk about; but about sunset the wind dies away, and the nights are calm and pleasant.

Although the distance between San Francisco and Vancouver is only about 700 miles, yet this is a tedious passage to make in a sailing ship, as the wind is generally dead foul, or from the N.N.W. We fortunately started on a calm day, and steamed close to the shore up the Californian coast as far as Cape Mendocino (200 miles), where we fell in with the usual northerly winds, which obliged us to stand out to the westward about 260 miles, so as to make a fair wind on the other tack; and, the wind favouring us, we eventually sighted Tatoosh Island Light (entrance of Juan de Fuca Strait) on April 23. These straits have been so well surveyed and often described that any remark about them would be superfluous. The entrance to Esquimalt harbour is somewhat narrow, but presents no dangers to a steam-ship. The harbour itself, though small, has capabilities for holding a large fleet, the greater part of it being good anchorage ground, with an average depth of five to seven fathoms. All recognise the value and importance of Esquimalt as a naval station; and it is a matter of regret with naval officers who have served on this station that it does not possess a large dock, capable of taking in our own ship, for instance, and that the dockyard is not expanded in a manner adequate to meet the wants of a large fleet in the event of war breaking out.

### APPENDIX TO CHAPTER X.

Remarks on the various Passages between leaving Vancouver Island, July 12, 1870, and arriving there again July 19, 1871—Winds, Currents, Harbours, &c.

After leaving Esquimalt harbour on July 12, finding the wind strong from the westward, anchored in Pedder Bay, remaining there till 3 A.M. on the 14th, when we weighed and steamed out through the Race Channel. As soon as clear of the Straits fell in with a W.N.W. wind, which carried us to Cape Reyes by 9 P.M. on the 19th. On account of the fog, remained under easy steam all night, keeping our position by the lead till daylight, when, closing in towards the land, we made out Cape Reyes north one mile at 7 A.M., and, steaming through the northern or Bonita Channel, and Golden Gate of San Francisco, anchored in 10 fathoms off the Pacific Mail Steam Company's wharf at 10 A.M.

The northern or Bonita Channel has great advantages for steam-vessels, especially for vessels of deep draught. The least water we found was  $7\frac{1}{2}$  fathoms off Bonita Point, whereas when crossing the Bar last year we had only  $5\frac{1}{2}$  fathoms, which is barely sufficient for a vessel drawing 26 feet, should there be any swell at the time. Besides, in foggy weather, a vessel can find her way in through this channel when the leading marks for the Bar Channel would not be seen. The latter was the case when we came in.

The turning between Bonita Point and Four Fathom Bank is rather sharp, and for that reason it is advisable when going out that way to start with the last of the flood, so as to pass Bonita Point before the ebb makes with any strength.

Since the 'Zealous' first entered by this channel the lighthouse on Point Reyes has been completed, and two black buoys have been placed on the Four Fathom Bank.

The one at the west end lies W. by S.  $\frac{1}{2}$  S.  $3\frac{1}{4}$  miles from the other at the east end, which lies in  $5\frac{1}{2}$  fathoms W. by S.  $\frac{1}{2}$  S.,  $1\frac{1}{8}$  mile from Bonita Point.

Fairway buoys have also been placed for crossing the Bar. These are painted black and white, placed in line with Fort Point, bearing N.E.  $\frac{7}{8}$  E. Outer Buoy is outside the Bar in  $13\frac{1}{2}$  fathoms, with the Middle Buoy bearing N.E.  $\frac{7}{8}$  E.  $5\frac{1}{4}$  miles, and Fort Point 10 miles distant. Middle Buoy is in  $9\frac{1}{2}$  fathoms, with Inner Buoy N.E.  $\frac{7}{8}$  E.  $2\frac{5}{8}$  miles, and Fort Point  $4\frac{3}{4}$  miles distant. Inner Buoy is in 20 fathoms, between Bonita and Lobos Points, with Fort Point bearing N.E.  $\frac{7}{8}$  E.  $2\frac{1}{6}$  miles.

Left San Francisco on the afternoon of September 14, 1870, under steam to the southward of the channel recommended, carrying six fathoms over the Bar, and shaped course S.S.E. Experienced light N.W. winds till lat. 13° N. and long. 106° W., when we fell in with light S.W. winds, which carried us up to the anchorage in Panama Roads on October 19.

The currents were various and in the whole distance cancelled one another. On September 28 passed over the position assigned to an island (?) in lat. 19° 21′ N. and long. 115° 20′ W. without seeing anything of it.

The thermometer during the passage ranged from

Air			Water
Min. 64°			63°
Max. 81°			82°

Left Panama on October 29, and experienced S.W. winds, varying in force from 2 to 5 all the way to Payta, which necessitated constant steaming: the currents variable. Whilst passing the Gulf of Guayaquil the ship was set one mile per hour to the S.S.E., and when abreast of Sal Point nearly three miles an hour to the S.W.; but these sets are attributable to the tide, which the sailing directions mention as taking the bend of the land. The change of temperature

one finds on approaching Payta from the northward is remarkable. It is caused by the Humboldt current, and makes the climate of Payta most enjoyable after the moist heat of Panama. On leaving the latter place the thermometer at noon showed, air 81° and water 79°. Outside the harbour of Payta it showed, air 68° and water 60°.

We found the following bearings gave the ship a snug berth:

Signal House, near Inner Point N. 88° W. Correct magnetic. Church Tower . . . S. 11° E.

Payta is a good harbour for a ship to refit in. Coal may be obtained at the Steam Navigation Company at 20 dollars per ton. Water exceedingly scarce. Fresh beef and vegetables moderately good, and price reasonable. We left Payta on November 14 for Tomé, and experienced S.S.E. to E. tradewinds, force from 3 to 5, as far as lat. 27° S. and long. 99° W., and then light breezes from N.E., N.W., and S.W. With the exception of one day, we carried royals the whole passage. The currents between lat. 5° and 29° S. set the ship about 230 miles to the W.N.W., after which they became variable in direction and force. We anchored in Tomé Bay on the 31st day. Here fresh beef, vegetables, and fruit may be obtained—also, poultry and sheep—at reasonable prices, by ordering them in from the country.

We left Tomé on December 21, and sailed across to the island of Juan Fernandez, anchoring in Cumberland Bay on the 24th in 20 fathoms, with the following bearings:

West point of Bay . N. 37° W. Correct magnetic. Fort S. Juan Baptista

A limited supply of fresh provisions, vegetables, and fruit may be obtained here. We spent Christmas Day at this anchorage, and the following day left for Valparaiso, where we arrived on the 28th inst. in 32 fathoms, off Fort Antonio.

Baga Rock . . . N.  $52^{\circ}$  W. Signal Telegraph S.  $25^{\circ}$  E. Correct magnetic.

Left Valparaiso Bay on February 6, 1871, and anchored in Coquimbo Bay on the 9th, having, on account of the calm weather, steamed nearly the whole way.

Pelican Rock N. 38° W. Correct magnetic.

From Coquimbo we proceeded to Arica, with a southerly wind, but little current; and, after staying a few hours at Arica, steamed up the coast to Islay with little or no wind; but a strong current, which set the ship during the night N. 54° W. 26 miles. At Islay anchored in 27 fathoms, with the

West extreme of White Islet, S.W.  $\frac{1}{4}$  S. Landing-place . . . E.  $\frac{1}{2}$  S.

After remaining at Islay a few days, taking advantage of White Islet as a target for our quarterly firing, left on February 26 for Callao, and anchored there March 3, in 6 fathoms, with

Callao Point and Round Island S. by W. 4 W. Cape San Lorenzo . . . W. by S.

On the way winds were very light from the S.E., and current strong to the N.W.

Left Callao on March 11, and arrived at Payta on the 16th. We remained here only a few hours, and then sailed for Honolulu, where we arrived April 27, after a passage of 42 days; during which time we experienced the trade from S.E. to E., force, 2 to 5, till in lat. 2° S. and long. 114° W.; then steaming for four days into lat. 5° N. and 116° W. fell in with the N.E. trade, accompanied by heavy squalls of rain and thunder. As we went north the force of the wind increased, and carried the ship from 7 to 9 knots through the water—rather refreshing after the slow progress made in the S.E. trades. The currents during this passage were to the westward, assisting us in that direction about 530 miles.

There not being sufficient water for a vessel of deep

draught to go over the Bar to the inner anchorage, we anchored outside in 13 fathoms.

Diamond Rock S. 71° E. Lighthouse on Reef N. 25° E.

Left Honolulu on May 6, and steamed to the Island of Maui, where we anchored in 10 fathoms off M'Kee's landing place.

During the passage across we found the west positions of these islands as laid down in chart 1,510 (Sandwich Islands) so very inaccurate as to render it impossible to fix the ship's position by cross-bearings; a notification of which was sent to the Admiralty.

Left Maui on the evening of May 9 for San Francisco, and, after a long and tedious passage, made Point Reyes Light at 8 P.M. on June 14. At 9 P.M. saw the Farallon Light, but by midnight lost sight of both in a fog. Anchored at 5 A.M. in 17 fathoms, remaining till 11 A.M., when, the fog lifting, made out the land about Duxbury Point. Weighed and steamed in through Bonita Channel, and anchored off Rincon Point.

The winds and weather all the way from Honolulu were most vexatious—light, variable, and calms, of which latter we could not take advantage being short of coal. Before leaving Honolulu, on asking the captain of one of the regular traders to San Francisco what was the average passage, he said, 'Anything between 11 and 35 days;' a large margin, but no less true, as was proved by a barque that sailed shortly after us, taking 33 days.

Left San Francisco harbour June 30, but had to anchor shortly afterwards on account of a thick fog setting in through the entrance. It cleared off at 11 A.M., and we were enabled to proceed through the Bonita Channel till past Duxbury Point. Here fog again set in, so that we had continually to stop and sound. At midnight, feeling certain of being clear of all dangers, proceeded on our course for Van-

couver's Island, though the fog did not lift till the following night. On the 2nd the wind commenced from the N.N.W., when we ceased steaming, and kept ship by the wind, Cape Flattery bearing north 500 miles. On the following day the wind hauled round to N.N.E., from which quarter it continued to blow moderately strong till July 11, when Cape Flattery bore N. 70° E. 800! The wind then fell light, and we were enabled to steam, reaching the Straits of Fuca on the evening of the 18th, and anchored in Esquimalt harbour the next morning, after an absence of 372 days, out of which 221 had been spent at sea.

## APPENDIX TO CHAPTER XIII.

Remarks on the Passage from Vancouver Island to Valparaiso, calling at San Francisco, Mazatlan, San Blas, Manzanilla, Panama, and Payta—Winds, Currents, Anchorages, Temperature, &c.

We left Esquimalt on November 30, 1871, and arrived at San Francisco on December 9, having met with a heavy, confused sea, and strong southerly gales for the first three days after clearing the Straits of Fuca, but no current was experienced.

				Air		Sea
The	thermometer	on	leaving Esquimalt .	$42^{\circ}$		41°
**	,,	on	arrival at San Francisco	$54^{\circ}$		43°

Entered the harbour of San Francisco by the northern or Bonita Channel. This has been mentioned before as preferable to crossing the Bar for steamers of deep draught, and further experience leads me to repeat that opinion for the following reasons:

1. On coming from the northward at night or in foggy weather Point Reyes is easily made, and the land kept in sight all the way to Bonita Point, taking care to give Duxbury Reef a wide berth. After rounding Point Reyes, should the weather be too thick to keep sight of the coast, it would be advisable to anchor in Drake's Bay, and weigh the moment the fog lifts. The 'Zealous' did this on one occasion, and entered the harbour when she could not have attempted the Bar Channel.

- 2. When leaving or entering the harbour during, or shortly after, heavy weather, this channel is preferable as carrying the smoothest and deepest water. The least water is 7 fathoms, just off Bonita Point, whereas on the Bar there is only  $5\frac{1}{4}$  fathoms, which is not sufficient when there is much sea running.
- 3. When leaving the harbour during foggy weather, Bonita Channel is certainly more secure.

We moored in about the same spot as on our previous visit, which I consider the most convenient anchorage for men-of-war.

 $\label{eq:Anchorage bearings, correct magnetic} Anchorage bearings, correct magnetic . \begin{cases} \text{Mission Rock} & \text{s. S. 16}^{\circ} \text{ E.} \\ \text{Rincon Rock Buoy} & \text{N. 50}^{\circ} \text{ W.} \\ \text{Telegraph Hill} & \text{s. N. 61}^{\circ} \text{ W.} \end{cases}$ 

Care must be taken not to anchor within 500 yards of the shore, as some order exists against men-of-war anchoring within that distance. On the occasion of a merchant-ship dragging foul of the 'Zealous,' and doing both vessels considerable injury, the owner tried to get off payment of damages on the plea that we were within the prescribed distance. Could he have proved such to have been the case we should have had to pay for the damage his vessel sustained; but he failed.

Left San Francisco January 1, 1872, by Bonita Channel. Owing to a heavy sea running it was dangerous to cross the Bar. We found no difficulty in Bonita Channel, but it is best taken at slack water on account of the strong eddies off Bonita Point. Passing eight miles west of Guadaloupe Island, arrived at Mazatlan on the 17th, having experienced

fine weather and light winds and a current of about 216 miles to the E.S.E.

		Air		Sea
Thermometer	on leaving San Francisc	o 54°		$54^{\circ}$
	on arrival at Mazatlan			74°

Moored here in nine fathoms, with four shackles on each cable.

	Black Rock . S. 17° E.
Anchorage bearings, correct magnetic	. South Bluff S. 70° W.
g	Blossom Rock Buoy S. 70° E.

This anchorage is considered good and safe, except between May and December, when vessels must either anchor outside or stand off and on under easy canvass on account of the heavy storms that come on suddenly from the S.W.

Left Mazatlan January 24 and arrived at San Blas on the 26th.

	Piedra la Tierra . N. 29° W.
Anchorage bearings, correct magnetic	. Rock of El Borrejo N. 26° E.
0,	Bar Point . N. 76° E.

This locality is also visited by strong storms from the S.W. during May and December.

Left San Blas on January 26, and touched at Manzanilla on February 2 for a few hours; then proceeded on to Panama, where we arrived on January 25, having experienced fine weather and light winds, and currents 350 miles to the E.S.E., 45 E.N.E., and 41 S.W.

```
Thermometer on leaving Mazatlan . 75° . . . . 74°
, on arrival at Panama 83° . . . 79°
```

Left Panama March 7, and arrived at Payta on the 17th. A breeze carried us out of the bay, after which we had to steam the whole distance against head winds. Currents very slight, varying between N.E. and S.E.

			Air		Sea
Thermometer	on	leaving Panama	81°		$82^{\circ}$
,,	on	arrival at Payta	$67^{\circ}$		67°

Left Payta March 19, and arrived at Valparaiso April 22.

We were fortunate in not having to stretch further to the westward than 96° W. Currents were variable, but westerly predominated by about 200 miles.

Thermometer	on leaving Payta	$^{ m Air}_{ m 63^{\circ}}$ .	Sea 62°
"	on arrival at Valpa	raiso 59° .	58°

## APPENDIX TO CHAPTER XVI.

Remarks on the Passage from Tomé to Connor Cove—Smyth's Channel
—English Narrows—Port Grappler—Puerto Bueno—Isthmus Bay—
Sandy Point.

Left Tomé on the morning of December 4, and arrived at Coronel that afternoon, where we took on board 100 tons of coal at 13 dollars per ton. The same quality of coal was being shipped last year at six dollars per ton. However, the coal proved to be far better than was anticipated; and, taking into consideration the immense rise in the market value all over the world, 13 dollars was not so very high. Its consumption, in comparison with good Welsh coal, is about 12 per cent. more rapid; very little ashes or soot, clinkers large, with a great deal of smoke of a dark brown colour.

The following bearings placed the ship in a convenient berth for coaling.

Extreme of Puchuco Point . S. 87° E. Point North of Chambeque Bay S. 11° E. Correct magnetic.

Left Coronel for the southward on the 17th instant, but, finding a heavy head sea, anchored under the lee of Mocha Island, in English Creek, in 13 fathoms. The sea moderating, weighed on the 11th, and on the afternoon of the 16th sighted Cape Gallegos; passed Tres Montes at sunset, and shaped course for Ayautau Islands, which, on a clear night, can be seen from a distance of sixteen miles. On this occa-

sion the weather was thick; so did not make them out till midnight, when distant about ten miles. The Wager Islands showed at the same time. These islands are very remarkable in appearance, and form an excellent mark for the entrance of the Messier Channel. At a distance of twenty miles the Wager Islands appear table-topped in the centre, sloping down apparently close to the sea, then rising and forming a kind of low hummock at its south extremity. The Ayautau Islands, on an E.S.E. bearing, appear like two haycocks, the largest of which will, coming from the W.N.W., be on the right. These also are excellent marks for the entrance to Messier Channel. When they are made out (Ayautau Islands) the ship should be steered directly for them till within three miles (especially by a stranger). At this distance the small islands, close to and S.E. of Ayautau, will become visible; one forming a low point at its north extremity and having a small hummock on its southern point. This island is very perplexing to a stranger, especially if the weather becomes thick. It is then difficult to determine whether it belongs to the Ayautau group or the main land beyond. But passing Ayautau at a distance of three miles, bearing E. by N. ½ N., it will at once be seen not to belong to the main land, as the opening between them shows out.

We steered directly for Ayautau till within three and a half miles; then, leaving it on the port hand, steered for the entrance to Messier Channel. Sombrero Island was sighted about 3 A.M., just at break of day, and shortly afterwards observed Middle Island ahead.

We entered Connor Cove at noon, and anchored in 13 fathoms (mud). Laid out a 9-inch hawser astern, and made fast to a large tree, effectually mooring the ship in one position, with her head outwards, which position was retained for a week without difficulty, pending the 'Scylla's' arrival. This cove would accommodate a vessel of any size moored in like manner. The 'Araucania,' a P. M. S.'s Company's steamer, over 300 feet long, anchored for a night ahead of

us, securing her stern with a hawser to our bows. The 'Scylla' on arrival took up the same position.

On the morning of December 22 left Connor Cove and proceeded towards the English Narrows with H.M.S. 'Scylla' in company, four cables astern. Before entering the channel leading to the English Narrows, a stranger should be careful to count the points of islands. After passing three points, or two openings, haul in between the third point and Cavour Island, and steer for the English Narrows. It would be highly beneficial if a beacon or some mark were placed on Cavour Island to distinguish it from the rest. A simple device, such as cutting away a few trees, leaving two or three together, would serve equally well to put it beyond a doubt which is the right opening to turn at. For one unacquainted with this channel it is not unnatural to believe the last point to be the correct one to turn at, whereas it is the N.W. point of Cavour Island. A ship then might find herself in Magenta Bay and lose the tide for the Narrows. By making a mistake the other way, and entering between the two islands north of Cavour, a steamer would find herself in an awkward position, having no room to turn, go ahead, back astern, and no place to anchor. Keep along west side of Cavour Island, clear of the kelp and two little islets just outside of this patch until Clio Island opens clear of a larger island north of it, which has two trees on its summit, and, like Clio Island, covered with bushes. Then both channels will be open, and Middle or Mid Channel Island will show out clear, and you may steer towards Cedar Point, avoiding foul ground off Clio Island and the island north of it.

We entered the Narrows at about 9.30 A.M., having regulated our speed in order to round Mid Channel Island an hour before low water, so as to have the last of the ebb against us. We experienced no tide or current whilst entering, or on passing Mid Channel Island; but as the ship's head became pointed fairly in centre of southern entrance, steaming about six knots per hour, the tide caught her on the starboard

bow and swept her sharp round towards an islet on the eastern shore. The helm was immediately put hard-a-port, at first without any effect; but just as the order had been given to go 'astern full speed' the ship responded to her helm, and her bow went to starboard sufficiently to clear the islet. The engines were then moved ahead, and one minute afterwards felt the ship take the ground. Stopped engines and sounded. Found 7 fathoms under the stern, 6 amid-ships, 4 under port bow, and  $2\frac{3}{4}$  under starboard. Moved the engines astern full speed, and the ship came off.

According to the plan of English Narrows there is 7 fathoms marked just on the spot we took the ground. The English Narrows will be much safer for navigation as the tides become better known. I am of opinion that the tide in these Narrows conforms to its turning in the Straits of Magellan and flows three hours after high water, which would account for our meeting a strong ebb tide in the southern entrance when it was actually low water. It could not have been falling, or the ship would not have come off so easily without transporting weights, &c., but directly the engines were turned astern.

We anchored in Port Grappler at 3 P.M., in 9 fathoms, with centre of Diamond Island N. 14° E.; N.W. extreme of Clone Island S. 56° W. This is a fine harbour, easy to enter, and swinging room for vessels of great length.

Left Port Grappler at 3.30 A.M. on the 23rd. Passed through Guia Narrows at 3 P.M. In approaching these Narrows, should the weather come on thick it is advisable to keep close to San Juan Island. When it clears up, shape a careful course for the Narrows, and the opening will soon be seen.

In fine weather they do not present any difficulties. After passing through it is advised to keep close to the eastern shore approaching Cape Charles, to avoid a doubtful rock marked 'P.D.' We kept a good look-out, but observed nothing that indicated a rock or shoal. Anchored in Puerto

Bueno harbour at 5.40 P.M, in 13 fathoms, with highest point of Puyuta Island N. 3° E; centre of Gorgon Island N. 65° E.; N.W. extreme of Hoskyn Island N. 59° W. The entrance to Puerto Bueno is not difficult to make. Coming from the northward a round hill, or hummock, will be observed just north of the entrance; then apparently low land, and in front of the entrance will be seen three small islets. There is also on Esperanza Island a remarkable opening in the land, bearing about S.W. by S. from the entrance, which will serve as a good mark, though inferior to these three islands. There is also a good and convenient anchorage. Leaving Puerto Bueno at 6 A.M. on the 24th, we proceeded down the channel, and anchored in Isthmus Bay at 5 P.M., in 22 fathoms (rocky and uneven bottom), with centre of Hurlow Island N. 30° W., and point N.E. of Selfe Point, S. 43° W. The 'Scylla' anchored to seaward I can say nothing in favour of the outer anchorage of Isthmus Bay; the plan is no guide as to depth of water, for at low water we had 26, 27, and no bottom at 30 fathoms, whereas on the plan the greatest depth is 23 fathoms. On the following afternoon, finding the ship swinging with her stern close to the kelp, or western shore, weighed and shifted berth. After vainly endeavouring to find something like a bottom, let go the anchor again in 22 fathoms, with centre of Hurlow Island N. 8° W., point N.E. of Selfe Point S. 48° W. Weighed at 2 A.M. on the 26th, and our anchor came up minus one fluke; a clear proof of the rocky, uneven nature of the bottom. Took Mayne's Channel, and passed over the ridge with nothing less than 7 fathoms; the deepest water was on the starboard hand, close to the kelp. In approaching this channel from the northward, on altering course off Cutler Island, where its highest peak bears N.W. 1/4 W., the highest part of Orlebar will be S. by W. 3 W; steer for it until a little east of Francis Islets, off the S.E. point of Baverstock, which is high land. Then Bradbury Rock, or Islet, will be well open west of Long Island, S.E. & S. From this position steer S.S.E.  $\frac{3}{4}$  E. until the peak of Baverstock(the highest one) bears N.W.W. by  $\frac{1}{2}$  W. Keep it astern by steering S.E. by E.  $\frac{1}{2}$  E. until clear of the rock awash west of the centre of Green Island. When clear, bring Bradbury Islet S.E.  $\frac{1}{4}$  S., and steer for it through the channel on this bearing. When the S.E. point of Green Island bears N.E.  $\frac{1}{4}$  N., a ship may be hauled to the southward and steered for the ridge. Bradbury is a small islet or rock above water. This with a good beacon would form a good leading mark for the deepest water in Mayne Channel. A couple of buoys would be better, one on each side of the channel, as in thick weather a distant mark would be obscured.

Proceeding down the channel, we passed Tamar Island, and considered ourselves fairly in the Straits of Magellan at 10 A.M.; rounded Cape Forward at 10·30 P.M., and anchored off Sandy Point at 5·30 A.M. on December 27, in 10 fathoms, with centre window of Block House and Flagstaff in one, N. 45° W.; Cairn of Sandy Point N. 74° E.

Our divers here made a more complete examination than they had been able to do at Port Grappler of the damage done by going ashore in the English Narrows, and reported about 28 feet of false keel gone; pieces of stem and main keel torn away, and second garboard strake on port side much rent and split. On the starboard side two planks much bruised and oakum torn out. Since touching the ground ship has made 7 inches of water an hour.

Took on board 400 tons of coal at Sandy Point, at 10 dollars per ton, which proved very dear at the price. Its evaporation power is very small: consumption two to one of ordinary Welsh coal. That portion which will consume does so rapidly, the remainder forming clinker and ashes like that produced from wood.

During our passage through the Straits the barometer fell to 29.06, and remained so for several hours, without any change of wind, or accompanied by bad weather.

The 'Scylla' left Sandy Point for the Falkland Islands on

December 30, with orders to meet us again in lat. 45° 20′ S. and long. 50° W. We left on January 4, 1873, meeting the last part of a strong flood tide in the Second Narrows. But fortunately a strong breeze from the westward assisted the engines, while the ebb carried us through the First Narrows and abreast of Dungeness Spit, which we passed about midnight. Cape Dinero was the last land we saw.

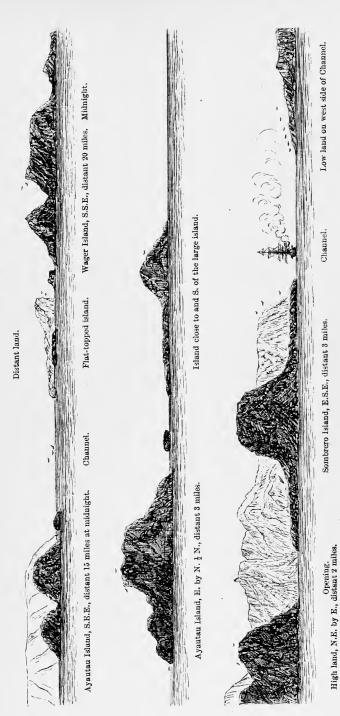
At daylight we were clear of the Straits, and shaped course for the rendezvous. We arrived here and picked up the 'Scylla' on the 11th, then shaped course for lat. 30° S. and long. 8° W. On the night of the 17th, whilst reefing topsails to a freshening gale from the northward, the 'Scylla' parted company, and we saw nothing more of her till reaching the rendezvous on the 27th. She was then despatched to St. Helena, where we arrived on February 5.

During our passage between Sandy Point and St. Helena, we experienced fine weather and light winds, with the exception of the breeze we had on January 17. It only lasted a few hours, but occasioned a heavy troubled sea the next day, making the ship roll from 26° to 30°, so that the leak increased from seven to nine inches.

Little or no current till within the tropics, when we found a steady daily set of about twelve miles to the westward, and the trade winds very easterly.

The 'Scylla' left for England on February 6. We sailed on the 9th, and arrived at Ascension on the 15th. Trade winds southerly and light. Left Ascension February 20, steamed up towards the Coast of Africa for eight days, then stretched out under sail for St. Vincent. Unable to fetch, had to steam into Porto Praya, Island of St. Yago, for coal. Live stock here plentiful and moderate in price. Left Porto Praya March 10, and arrived at St. Vincent next evening. Arrived at Madeira on the 23rd and left on the 26th. Off the Spanish coast encountered a strong N.E. wind. After four days' beating about under sail, put into Vigo for coal. Left on April 7, and anchored in Plymouth Sound on the 12th.

# Approaching the Gulf of Penas from the northward. Making the entrance at night.





## Snyth's Channel from the Northward. Off Connor Cove.



View of the west extreme of Middle Island, distant 1 mile, looking South.





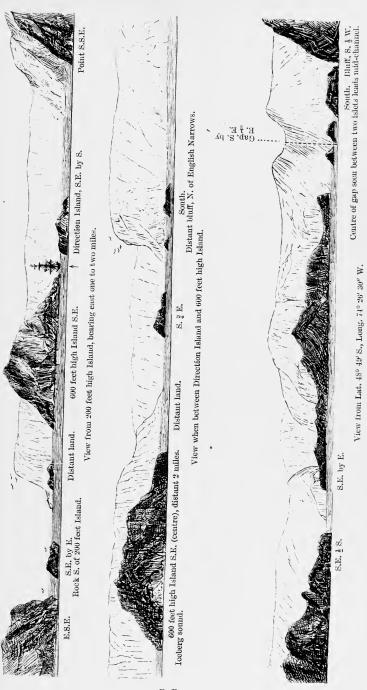
S.S.E., bluff nearly S.S.E. Highest part of Island, No. 2 Pt. No. 3 Pt. (No. 1.) View from position, N. by W. 14 miles from the station, on 380 feet high Island, looking towards Armigen Island. Armigen Island, S.E. & E. Rock, S.E. S.E. by S., Cavour Island. Channel. No. 1 Pt.



Two small islets. Loney Islet. La Marmora Island. (No. 2.) View from Loney Islet, bearing S. by W. near to the ship, and not far off the little Islet in the bay, on the north part of Cavour Island. Channel. { Pt. S. of } Islets. } Islet off the N. point of Cavour Island. Land about Cavour Island.

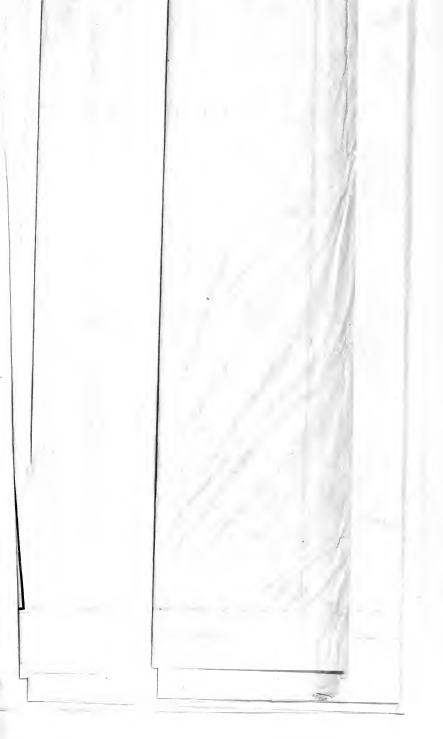


CHANGE LIBERT TA





LONDON: PRINTED BY
SPOTTISWOODE AND CO., NEW-STREET SQUARE
AND PARLIAMENT STREET





39 PATERNOSTER Row, E.C. London: March 1873.

## GENERAL LIST OF WORKS

PUBLISHED BY

## Messrs. LONGMANS, GREEN, READER, and DYER.

ARTS, MANUFACTURES, &c	14	MISCELLANEOUS WORKS and POPULAR	
ASTRONOMY, METEOROLOGY, POPULAR		METAPHYSICS	7
Geography, &c.	8	NATURAL HISTORY & POPULAR SCIENCE	9
BIOGRAPHICAL WORKS	4	POETRY and THE DRAMA	19
CHEMISTRY, MEDICINE, SURGERY, and		Religious and Moral Works	15
the Allied Sciences	11	RURAL SPORTS, &c	19
CRITICISM, PHILOSOPHY, POLITY, &c	5	TRAVELS, VOYAGES, &c	
FINE ARTS and ILLUSTRATED EDITIONS	13	Works of Fiction	
HISTORY, POLITICS, and HISTORICAL		Works of Utility and General	
Memoirs	1	Information	20
INDEX 21-	-24		

## History, Politics, Historical Memoirs, &c.

**-∞⊱6**;∞-

- Estimates of the English Kings from William the Conqueror to George III. By J. LANGTON SANFORD, Author of 'Studies and Illustrations of the Great Rebellion' &c. Crown 8vo. price 12s. 6d.
- The History of England from the Fall of Wolsey to the Defeat of the Spanish Armada. By JAMES ANTHONY FROUDE, M.A.

CABINET EDITION, 12 vols. cr. 8vo. £3 12s. LIBRARY EDITION, 12 vols. 8vo. £8 18s.

- The English in Ireland in the Eighteenth Century. By James Anthony Froude, M.A. late Fellow of Exeter College, Oxford. In Two Volumes. Vol. I., 8vo. price 16s.
- The History of England from the Accession of James II. By Lord MACAULAY:—

STUDENT'S EDITION, 2 vols. crown 8vo. 12s. PEOPLE'S EDITION, 4 vols. crown 8vo. 16s. CABINET EDITION, 8 vols. post 8vo. 48s. LIBRARY EDITION, 5 vols. 8vo. £4.

Lord Macaulay's Works. Complete and uniform Library Edition. Edited by his Sister, Lady Trevelyan. 8 vols. 8vo. with Portrait, price £5. 5s. clcth, or £8. 8s. bound in tree-calf by Rivère.

- Memoirs of Baron Stockmar. By his Son, Baron E. von Stockmar. Translated from the German by G. A. M. Edited by Max Müller, M.A. 2 vols. crown 8vo. price 21s.
- Varieties of Vice-Regal Life. By Major-General Sir WILLIAM DENISON, K.C.B. late Governor-General of the Australian Colonies, and Governor of Madras. With Two Maps. 2 vols. 8vo. 28s.
- On Parliamentary Government in England: its Origin, Development, and Practical Operation. By Alpheus Todd, Librarian of the Legislative Assembly of Canada. 2 vols. 8vo. price £1. 17s.
- The Constitutional History of England since the Accession of George III. 1760—1860. By Sir THOMAS ERSKINE MAY, K.C.B. Cabinet Edition (the Third), thoroughly revised. 3 vols. crown 8vo. price 18s.
- The History of England, from the Earliest Times to the Year 1865. By C.D. YONGE, Regius Professor of Modern History in Queen's College, Belfast. New Edition. Crown 8vo. 7s. 6d.
- Lectures on the History of England, from the Earliest Times to the Death of King Edward II. By WILLIAM LONGMAN. With Maps and Illustrations. 8vo. 15s.

- The History of the Life and Times of Edward the Third. By WILLIAM LONGMAN. With 9 Maps, 8 Plates, and 16 Woodcuts. 2 vols. 8vo. 28s.
- History of Civilization in England and France, Spain and Scotland. By HENRY THOMAS BUCKLE. New Edition of the entire work, with a complete INDEX. 3 vols. crown 8vo. 24s.
- Realities of Irish Life. By W. STEUART TRENCH, late Land Agent in Ireland to the Marquess of Lansdowne, the Marquess of Bath, and Lord Digby. Fifth Edition. Crown 8vo. 6s.
- The Student's Manual of the History of Ireland. By M. F. CUSACK, Authoress of 'The Illustrated History of Ireland.' Crown 8vo. price 6s.
- A Student's Manual of the History of India, from the Earliest Period to the Present. By Colonel Meadows Taylor, M.R.A.S. M.R.I.A. Second Thousand. Crown 8vo. with Maps, 7s. 6d.
- The History of India, from the Earliest Period to the close of Lord Dalhousie's Administration. By John Clark Marshman. 3 vols. crown 8vo. 22s. 6d.
- Indian Polity; a View of the System of Administration in India. By Lieut.-Col. George Chesney. Second Edition, revised, with Map. 8vo. 21s.
- A Colonist on the Colonial Question. By Jehu Mathews, of Toronto, Canada. Post 8vo. price 6s.
- An Historical View of Literature and Art in Great Britain from the Accession of the House of Hanover to the Reign of Queen Victoria. By J. Murray Graham, M.A. 8vo. price 12s.
- Waterloo Lectures; a Study of the Campaign of 1815. By Colonel Charles C. Chesner, R.E. late Professor of Military Art and History in the Staff College. Second Edition. 8vo. with Map, 10s. 6d.
- Memoir and Correspondence relating to Political Occurrences in June and July 1834. By EDWARD JOHN LITTLETON, First Lord Hatherton. Edited, from the Driginal Manuscript, by HENRY REEVE, C.B. D.C.L. 8vo. price 7s. 6d.
- Chapters from French History; St. Louis, Joan of Arc, Henri IV. with Sketches of the Intermediate Periods. By J. H. Gurner, M.A. New Edition. Fcp. 8yc. 6s. 6d.

- Royal and Republican France. A Series of Essays reprinted from the 'Edinburgh,' Quarterly,' and 'British and Foreign' Reviews. By HENRY REEVE, G.B. D.C.L. 2 vols. 8vo. price 21s.
- The Imperial and Colonial Constitutions of the Britannic Empire, including Indian Institutions. By Sir Edward Creasy, M.A. &c. With Six Maps. 8vo price 15s.
- The Oxford Reformers—John Colet, Erasmus, and Thomas More; being a History of their Fellow-Work. By FREDERIC SEEBOHM. Second Edition. 8vo. 14s.
- A History of Greece. Drawn from Original Authorities, and designed chiefly for the use of Colleges and Schools. By the Rev. GEORGE W. COX, M.A., late Scholar of Trinity College, Oxford; Author of 'The Aryan Mythology' &c. [In the Press.
- The History of Greece. By C. Thirlwall, D.D. Lord Bishop of St. David's. 8 vols. fcp. 28s.
- The Tale of the Great Persian War, from the Histories of Herodotus. By George W. Cox, M.A. late Scholar of Trin. Coll. Oxon. Fcp. 3s. 6d.
- The Sixth Oriental Monarchy; or, the Geography, History, and Antiquities of Parthia. Collected and Illustrated from Ancient and Modern sources. By George Rawlinson, M.A. Camden Professor of Ancient History in the University of Oxford, and Canon of Canterbury. With Maps and Illustrations. 8vo. price 16s.
- Greek History from Themistocles to Alexander, in a Series of Lives from Plutarch. Revised and arranged by A. H. Clough. Fep. with 44 Woodcuts, 6s.
- History of the Romans under the Empire. By Very Rev. CHARLES MERIVALE, D.C.L. Dean of Ely. 8 vols. post 8vo. price 48s.
- The Fall of the Roman Republic; a Short History of the Last Century of the Commonwealth. By the same Author. 12mo. 7s. 6d.
- Encyclopædia of Chronology, Historical and Biographical: comprising the Dates of all the Great Events of History, including Treaties, Alliances, Wars, Battles, &c.; Incidents in the Lives of Eminent Men, Scientific and Geographical Discoveries, Mechanical Inventions, and Social, Domestic, and Economical Improvements. By B. B. Woodward, B.A. and W. L. R. Cates. 8vo. price 42s.

- The History of Rome. By Wilhelm Ihne. English Edition, translated and revised by the Author. Vols. I. and II. 8vo. 30s.
- History of European Morals from Augustus to Charlemagne. By W. E. H. Lecky, M.A. 2 vols. 8vo. price 28s.
- History of the Rise and Influence of the Spirit of Rationalism in Europe. By the same Author, Cabinet Edition (the Fourth), 2 vols, crown 8vo. price 16s.
- God in History; or, the Progress of Man's Faith in the Moral Order of the World. By the late Baron Bunsex. Translated from the German by Susanna Winkworth; with a Preface by Dean Stanley. 3 vols. 8vo. 42s.
- Introduction to the Science of Re ligion: Four Lectures delivered at the Royal Institution of Great Britain in February and March 1870; with a Lecture on the Philosophy of Mythology and an Essay on False Analogies in Religion. By F. Max MÜLLER, M.A., Professor of Comparative Philology at Oxford. [In the Press.
- Socrates and the Socratic Schools. Translated from the German of Dr. E. Zeller, with the Author's approval, by the Rev. OSWALD J. REICHEL, B.C.L. and M.A. Crown 8vo. 8s. 6d.
- The Stoics, Epicureans, and Sceptics. Translated from the German of Dr. E. Zeller, with the Author's approval, by OSWALD J. REICHEL, B.C.L. and M.A. Crown 8vo. 14s.
- The English Reformation. By F. C. Massingberd, M.A. late Chancellor of Lincoln. 4th Edition. Fep. 8vo. 7s 6d.
- Three Centuries of Modern History. By CHARLES DUKE YONGE, Regius Professor of Modern History and English Literature in Queen's College, Belfast. Crown 8vo. 7s. 6d.
- Saint-Simon and Saint-Simonism; a Chapter in the History of Socialism in France. By ARTHUR J. BOOTH, M.A. Crown 8vo. price 7s. 6d.

- The History of Philosophy, from
  Thales to Comte. By George Henry
  Lewes. Fourth Edition, corrected and
  partly rewritten. 2 vols. 8vo. 32s.
- The Mythology of the Aryan Nations. By George W. Cox, M.A. late Scholar of Trinity College, Oxford. 2 vols. 8vo. price 28s.
- Maunder's Historical Treasury; comprising a General Introductory Outline of Universal History, and a Series of Separate Histories. Fcp. 8vo. price 6s.
- Critical and Historical Essays contributed to the Edinburgh Review by the Right Hon. Lord MACAULAY:—

STUDENT'S EDITION, crown 8vo. 6s. PEOPLE'S EDITION, 2 vols. crown 8vo. 8s. CABINET EDITION, 4 vols. 24s. LIBRARY EDITION, 3 vols. 8vo. 36s.

- History of the Early Church, from the First Preaching of the Gospel to the Council of Nicea, A.D. 325. By the Author of 'Amy Herbert.' New Edition. Fcp. 8vo. 4s. 6d.
- Sketch of the History of the Church of England to the Revolution of 1688. By the Right Rev. T. V. Short, D.D. Lord Bishop of St. Asaph. Eighth Edition. Crown 8vo. 7s. 6d.
- Essays on the Rise and Progress of the Christian Religion in the West of Europe. From the Reign of Tiberius to the End of the Council of Trent. By John Earl Russell. 8vo. [In the Press.
- History of the Christian Church, from the Ascension of Christ to the Conversion of Constantine. By E. Burton, D.D. late Regius Prof. of Divinity in the University of Oxford. Fep. 8vo. 3s. 6d.
- History of the Christian Church, from the Death of St. John to the Middle of the Second Century; comprising a full Account of the Primitive Organisation of Church Government, and the Growth of Episcopacy. By T. W. Mossman, B.A. Rector of East and Vicar of West Torrington, Lincolnshire. 8vo. price 16s.

## Biographical Works.

- The Life of Lloyd, First Lord Kenyon, Lord Chief Justice of England. By the Hon. George T. Kenyon, M.A. of Ch. Ch. Oxford. With Portraits of Lord and Lady Kenyon from Sketches by Sir Thomas Lawrence. 8vo. [Nearly ready.
- Memoir of the Life of Admiral Sir Edward William Codrington; with Selections from his Private and Official Correspondence, including Particulars of the Battles of the First of June 1794 and Trafalgar, the Expeditions to Walcheren and New Orleans, War Service on the Coast of Spain, and the Battle of Navarin. Edited by his Daughter, Lady BOURCHIER. With Two Portraits, Maps, and Plans. 2 vols. 8vo. price 36s.
- Life of Alexander von Humboldt.
  Compiled, in Commemoration of the Centenary of his Birth, by Julius Löwenberg, Robert Avé-Lallemant, and Alfred Dove. Edited by Professor Karl Bruhns, Director of the Observatory at Leipzig. Translated from the German by Jane and Caroline Lassell. 2 vols. 8vo. with Three Portraits, price 36s.
- Autobiography of John Milton; or, Milton's Life in his own Words. By the Rev. James J. G. Graham, M.A. Crown 8vo. with Vignette-Portrait, price 5s.
- Recollections of Past Life. By Sir Henry Holland, Bart. M.D. F.R.S., &c. Physician-in-Ordinary to the Queen. Third Edition. Post 8vo. 10s. 6d.
- Biographical and Critical Essays, Reprinted from Reviews, with Additions and Corrections. By A. HAYWARD, Esq. Q.C. 2 vols. 8vo. price 28s.
- The Life of Isambard Kingdom
  Brunel, Civil Engineer. By Isambard
  Brunel, B.C.L. of Lincoln's Inn, Chancellor of the Diocese of Ely. With Portrait, Plates, and Woodcuts. 8vo. 21s.
- Lord George Bentinck; a Political Biography. By the Right Hon. B. DIS-RAELI, M.P. Eighth Edition, revised, with a new Preface. Crown 8vo. 6s.
- Memoir of George Edward Lynch
  Cotton, D.D. Bishop of Calcutta, and
  Metropolitan. With Selections from his
  Journals and Correspondence. Edited by
  Mrs. Corrox. Second Edition, with Portrait. Crown 8vo. price 7s. 6d.

- The Life and Travels of George Whitefield, M.A. By JAMES PATERSON GLEDSTONE. 8vo. price 14s.
- The Life and Letters of the Rev. Sydney Smith. Edited by his Daughter, Lady HOLLAND, and Mrs. Austin. New Edition, complete in One Volume. Crown 8vo. price 6s.
- The Life and Times of Sixtus the Fifth. By Baron Hünner. Translated from the Original French, with the Author's sanction, by Hubert E. H. Jerningham. 2 vols. 8vo. 24s.
- Essays in Ecclesiastical Biography. By the Right Hon Sir J. Stephen, LL.D. Cabinet Edition. Crown 8vo. 7s. 6d.
- The Life and Letters of Faraday.

  By Dr. Bence Jones, Secretary of the Royal Institution. Second Edition, with Portrait and Woodcuts. 2 vols. 8vo. 28s.
- Faraday as a Discoverer. By John Tyndall, LL.D. F.R.S. New and Cheaper Edition, with Two Portraits. Fcp. 8vo price 3s. 6d.
- Leaders of Public Opinion in Ireland; Swift, Flood, Grattan, O'Connell. By W. E. H. LECKY, M.A. New Edition, revised and enlarged. Crown 8vo. 7s. 6d.
- Life of the Duke of Wellington.

  By the Rev. G. R. Gleig, M.A. Popular Edition, carefully revised; with copious Additions. Crown 8vo. with Portrait, 5s.
- Dictionary of General Biography; containing Concise Memoirs and Notices of the most Eminent Persons of all Countries, from the Earliest Ages to the Present Time. Edited by WILLIAM L. R. CATES. 8vo. price 21s.
- Letters and Life of Francis
  Bacon, including all his Occasional Works.
  Collected and edited, with a Commentary,
  by J. Spedding. Vols. I. to VI. 8vo.
  price £3. 12s. To be completed in One more
  Volume.
- Felix Mendelssohn's Letters from Italy and Switzerland, and Letters from 1833 to 1847, translated by Lady WALLACE. With Portrait. 2 vols. crown 8vo. 5s. each.
- Musical Criticism and Biography, from the Published and Unpublished Writings of Thomas Damant Earon, late President of the Norwich Choral Society. Selected and edited by his Sons. Crown 7s, 6d.

- Lives of the Queens of England.

  By Agnes Strickland. Library Edition, newly revised; with Portraits of every Queen, Autographs, and Vignettes. 8 vols. post 8vo. 7s. 6d. each.
- Apologia pro Vita Sua; being a History of his Religious Opinions. By John Henry Newman, D.D. of the Oratory of St. Philip Neri. New Edition. Post 8vo. price 6s.
- Memoirs of Sir Henry Havelock, K.C.B. By JOHN CLARK MARSHMAN. People's Edition, with Portrait. Crown 8vo. price 3s. 6d.
- The Rise of Great Families, other Essays and Stories. By Sir BERNARD BURKE, C.B., LL.D. Ulster King-of-Arms Crown 8vo. price 12s. 6d.
- Vicissitudes of Families. By Sir J. Bernard Burke, C.B. Ulster King-of-Arms. New Edition, remodelled and enlarged. 2 vols. crown 8vo. 21s.
- Maunder's Biographical Treasury. Thirteenth Edition, reconstructed and partly re-written, with above 1,000 additional Memoirs, by W. L. R. CATES. Fcp. 8vo.6s.

## Criticism, Philosophy, Polity, &c.

- On Representative Government. By JOHN STUART MILL. Third Edition. 8vo. 9s. crown 8vo. 2s.
- On Liberty. By JOHN STUART MILL. Fourth Edition. Post 8vo. 7s. 6d. Crown 8vo. 1s. 4d.
- Principles of Political Economy.
  By JOHN STUART MILL. Seventh Edition.
  2 vols. 8vo. 30s. or in 1 vol. crown 8vo. 5s.
- Utilitarianism. By JOHN STUART MILL. 4th Edit. 8vo. 5s.
- Dissertations and Discussions. By JOHN STUART MILL. Second Edition. 3 vols. 8vo. price 36s.
- Examination of Sir William
  Hamilton's Philosophy, and of the principal
  Philosophical Questions discussed in his
  Writings. By JOHN STUART MILL.
  Fourth Edition. 8vo. 16s.
- The Subjection of Women. By John Stuart Mill. New Edition. Post 8vo. 5s.
- Analysis of the Phenomena of the Human Mind. By James Mill. A New Edition, with Notes, Illustrative and Critical, by Alexander Bain, Andrew Findlater, and George Grote. Edited, with additional Notes, by John Stuart Mill. 2 vols. 8vo. price 28s.
- Principles of Economical Philosophy. By H. D. Macleod, M.A. Barristerat-Law. Second Edition, in Two Volumes. Vol. I. 8vo. price 15s.
- A Dictionary of Political Econonomy; Biographical, Bibliographical, Historical, and Practical. By H. D. MACLEOD, M.A. Vol. I. royal 8vo. 30s.
- A Systematic View of the Science of Jurisprudence. By Shellon Amos, M.A. Professor of Jurisprudence to the Inns of Court, London. 8vo. price 18s.

- The Institutes of Justinian; with English Introduction, Translation, and Notes. By T. C. SANDARS, M.A. Barristerat-Law. New Edition. 8vo. 15s.
- Lord Bacon's Works, collected and edited by R. L. Ellis, M.A. J. Spedding, M.A. and D. D. Heath. New and Cheaper Edition. 7 vols. 8vo. price £3.13s. 6d.
- A System of Logic, Ratiocinative and Inductive. By JOHN STUART MILL. Eighth Edition. 2 vols. 8vo. 25s.
- The Ethics of Aristotle; with Essays and Notes. By Sir A. Grant, Bart. M.A. LL.D. Third Edition, revised and partly re-written.
- The Nicomachean Ethics of Aristotle. Newly translated into English. By R. WILLIAMS, B.A. Fellow and late Lecturer Merton College, Oxford. 8vo. 12s.
- Bacon's Essays, with Annotations. By R. Whately, D.D. late Archbishop of Dublin. New Edition. 8vo. 10s. 6d.
- Elements of Logic. By R. Whately, D.D. late Archbishop of Dublin. New Edition. 8vo. 10s. 6d. crown 8vo. 4s. 6d.
- Elements of Rhetoric, By the sam Author. New Edition. 8vo. 10s. 6d. Crown 8vo. 4s. 6d.
- English Synonymes. By E. Jane Whately. Edited by Archbp. Whately 5th Edition. Fep. 3s.
- An Outline of the Necessary
  Laws of Thought: a Treatise on Pure and
  Applied Logic. By the Most Rev. W.
  THOMSON, D.D. Archbishop of York. Ninth
  Thousand. Crown 8vo. 5s. 6d.

- Causality; or, the Philosophy of Law Investigated. By George Jameson, B.D. of Old Machar. Second Edition, greatly enlarged. &vo. price 12s.
- Speeches of the Right Hon. Lord MACAULAY, corrected by Himself. People's Edition, crown 8vo. 3s. 6d.
- Lord Macaulay's Speeches on Parliamentary Reform in 1831 and 1832. 16mo. price ONE SHILLING.
- A Dictionary of the English Language. By R. G. LATHAM, M.A. M.D. F.R.S. Founded on the Dictionary of Dr. S. Johnson, as edited by the Rev. H. J. Todd, with numerous Emendations and Additions. 4 vols. 4 to. price £7.
- Thesaurus of English Words and Phrases, classified and arranged so as to facilitate the expression of Ideas, and assist in Literary Composition. By P. M. ROGET, M.D. New Edition. Crown 8vo. 10s. 6d.
- Three Centuries of English Lierature. By CHARLES DUKE YONGE, Regius Professor of Modern History and English Literature in Queen's College, Belfast. Crown 8vo. 7s. 6d.
- Lectures on the Science of Language. By F. MAX MÜLLER, M.A. &c. Foreign Member of the French Institute. Sixth Edition. 2 vols. crown 8vo. price 16s.
- Southey's Doctor, complete in One Volume, edited by the Rev. J. W. WARTER, B.D. Square crown 8vo. 12s. 6d.
- Manual of English Literature, Historical and Critical with a Chapter on English Metres. By THOMAS ARNOLD, M.A. New Edition. Crown 8vo. 7s. 6d.
- A Dictionary of Roman and Greek Antiquities. With about 2,000 Engravings on Wood, from Ancient Originals, illustrative of the Industrial Arts and Social Life of the Greeks and Romans. By ANTHONY RICH, B.A., sometime of Caius College, Cambridge. Third Edition, revised and improved. Crown 8vo. price 7s. 6d.
- A Sanskrit-English Dictionary.

  The Sanskrit words printed both in the original Devanagari and in Roman letters; with References to the Best Editions of Sanskrit Authors, and with Etymologies and comparisons of Cognate Words chiefly in Greek, Latin, Gothic, and Anglo-Saxon. Compiled by T. BENFEY. 8vo. 52s. 6d.
- A Latin-English Dictionary. By John T. White, D.D. Oxon. and J. E. Riddle, M.A. Oxon. Third Edition, revised. 2 vols. 4to. pp. 2,128, price 42s.

- White's College Latin-English Dictionary (Intermediate Size), abridged from the Parent Work for the use of University Students. Medium 8vo. pp. 1,048, price 18s.
- White's Junior Student's Complete Latin-English and English-Latin Dictionary. Revised Edition. Square 12mo. pp. 1,058, price 12s.

Separately English-Latin, 5s. 6d. Latin-English, 7s. 6d.

- An English-Greek Lexicon, containing all the Greek Words used by Writers of good authority. By C. D. Yonge, B.A. New Edition. 4to. 21s.
- Mr. Yonge's New Lexicon, English and Greek, abridged from his larger work (as above). Square 12mo. 8s. 6d.
- A Greek-English Lexicon. Compiled by H. G. LIDDELL, D.D. Dean of Christ Church, and R. Scott, D.D. Dean of Rochester. Sixth Edition. Crown 4to. price 36s.
- A Lexicon, Greek and English, abridged for Schools from Liddell and Scott's Greek-English Lexicon. Fourteenth Edition. Square 12mo. 7s. 6d.
- The Mastery of Languages; or, the Art of Speaking Foreign Tongues Idiomatically. By THOMAS PRENDERGAST, late of the Civil Service at Madras. Second Edition. 8vo. 6s.
- A Practical Dictionary of the French and English Languages. By Professor Léon Contanneau, many years French Examiner for Military and Civil Appointments, &c. New Edition, carefully revised. Post 8vo. 10s. 6d.
- Contanseau's Pocket Dictionary, French and English, abridged from the Practical Dictionary, by the Author. New Edition. 18mo. price 3s. 6d.
- New Practical Dictionary of the German Language; German-English, and English-German. By the Rev. W. L. BLACKLEY, M.A. and Dr. CARL MARTIN FRIEDLÄNDER. Post 8vo. 7s. 6d.
- Historical and Critical Commentary on the Old Testament; with a New Translation. By M. M. Kalisch, Ph.D Vol. I. Genesis, 8vo. 18s. or adapted for the General Reader, 12s. Vol. II. Exodus, 15s or adapted for the General Reader, 12s. Vol III. Leviticus, Part I. 15s. or adapted for the General Reader, 8s. Vol. IV. Leviticus, Part II. 15s. or adapted General Reader, 8s.

## Miscellaneous Works and Popular Metaphysics.

- An Introduction to Mental Philosophy, on the Inductive Method. By J. D. Morell, M.A. LL.D. 8vo. 12s.
- Elements of Psychology, containing the Analysis of the Intellectual Powers. By J. D. Morell, LL.D. Post 8vo. 7s. 6d.
- Recreations of a Country Parson. By A. K. H. B. Two Series, 3s. 6d. each.
- Seaside Musings on Sundays and Weekdays. By A. K. H. B. Crown 8vo. price 3s. 6d.
- Present-Day Thoughts, By A. K. H. B. Crown 8vo. 3s. 6d.
- Changed Aspects of Unchanged Truths; Memorials of St. Andrews Sundays. By A. K. H. B. Crown 8vo. 3s. 6d.
- Counsel and Comfort from a City Pulpit. By A. K. H. B. Crown 8vo. 3s. 6d.
- Lessons of Middle Age, with some Account of various Cities and Men. By A. K. H. B. Crown 8vo. 3s. 6d.
- Leisure Hours in Town; Essays Consolatory, Æsthetical, Moral, Social, and Domestic. By A. K. H. B. Crown 8vo. 3s. 6d.
- Sunday Afternoons at the Parish Church of a Scottish University City. By A. K. H. B. Crown 8vo. 3s. 6d.
- The Commonplace Philosopher in Town and Country. By A. K. H. B. 3s. 6d.
- The Autumn Holidays of a Country Parson. By A. K. H. B. Crown 8vo. 3s. 6d.
- Critical Essays of a Country Parson. By A. K. H. B. Crown 8vo. 3s. 6d.
- The Graver Thoughts of a County Parson. By A. K. H. B. Two Series, 3s. 6d. each.
- Miscellaneous and Posthumous Works of the late Henry Thomas Buckle. Edited, with a Biographical Notice, by HELENTAYLOR. 3 vols. 8vo. price 21.12s. 6d.
- In the Morningland, or the Law of the Origin and Transformation of Christianity; Travel and Discussion in the East with the late Henry Thomas Buckle. By JOHN S. STUART-GLENNIE, M.A. Post 8vo.
- Short Studies on Great Subjects.

  By James Anthony Froude, M.A. late
  Fellow of Exeter College, Oxford. 2 vols.

  crown 8vo. price 12s.

- Miscellaneous Writings of John Conington, M.A. late Corpus Professor of Latin in the University of Oxford. Edited by J. A. SYMONDS, M.A. With a Memoir by H. J. S. SMITH, M.A. LL.D. F.R.S. 2 vols. 8vo. price 28s.
- The Rev. Sydney Smith's Miscellaneous Works. Crown 8vo. price 6s.
- The Wit and Wisdom of the Rev. SYDNEY SMITH; a Selection of the most memorable Passages in his Writings and Conversation. Crown 8vo. 3s. 6d.
- The Eclipse of Faith; or, a Visit to a Religious Sceptic. By Henry Rogers. Twelfth Edition. Fep. 8vo. 5s.
- Defence of the Eclipse of Faith. By Henry Rogers. Third Edition. Fep. 8vo. price 3s. 6d.
- Lord Macaulay's Miscellaneous Writings:—
- LIBRARY EDITION, 2 vols. 8vo. Portrait, 21s. PEOPLE'S EDITION, 1 vol. crown 8vo. 4s. 6d.
- Lord Macaulay's Miscellaneous Writings and Steeches. Student's Edition, in One Volume, crown 8vo. price 6s.
- The Election of Representatives, Parliamentary and Municipal; a Treatise. By THOMAS HARE, Barrister-at-Law. Fourth Edition, adapting the proposed Law to the Ballot, with Appendices on the Preferential and the Cumulative Vote. Post 8vo. price 7s.
- Chips from a German Workshop; being Essays on the Science of Religion, and on Mythology, Traditions, and Customs. By F. Max Müller, M.A. &c. Foreign Member of the French Institute. 3 vols. 8vo. £2.
- A Budget of Paradoxes. By AUGUSTUS DE MORGAN, F.R.A.S. and C.P.S. of Trinity College, Cambridge. Reprinted, with the Author's Additions, from the Athenæum. 8vo. price 15s.
- The Secret of Hegel: being the Hegelian System in Origin, Principle, Form, and Matter. By JAMES HUTCHISON STIRLING, LL.D. Edin. 2 vols. 8vo. 28s.
- Lectures on the Philosophy of Law. Together with Whewell and Hegel, and Hegel and Mr. W. R. Smith; a Vindi cation in a Physico-Mathematical Regard By J. H. STIRLING, LL.D. Edin. 8vo, price 6s

- As Regards Protoplasm. By J. H. Stirling, LL.D. Edin. Second Edit., with Additions, in reference to Mr. Huxley's Second Issue and a new Preface in reply to Mr. Huxley in 'Yeast.' 8vo. price 2s.
- Sir William Hamilton; being the Philosophy of Perception: an Analysis. By J. H. Stirling, LL.D. Edin. 8vo. 5s.
- The Philosophy of Necessity; or, Natural Law as applicable to Mental, Moral, and Social Science. By Charles Bray. Second Edition. 8vo. 9s.
- A Manual of Anthropology, or Sience of Man, based on Modern Research. By Charles Bray. Crown 8vo. 6s.
- On Force, its Mental and Moral Correlates. By Charles Bray. 8vo. 5s.
- Time and Space; a Metaphysical Essay. By Shadworth H. Hodgson. 8vo. price 16s.
- The Theory of Practice; an Ethical Inquiry. By Shadworth H. Hodgson. 2 vols. 8vo. price 24s.

- Ueberweg's System of Logic and History of Logical Doctrines. Translated, with Notes and Appendices, by T. M. Lindsay, M.A. F.R.S.E. 8vo. price 16s.
- The Senses and the Intellect. By ALEXANDER BAIN, LL.D. Prof. of Logic in the Univ. of Aberdeen. Third Edition. 8vo. 15s.
- Mental and Moral Science: a Compendium of Psychology and Ethics. By ALEXANDER BAIN, LL.D. Third Edition. Crown 8vo. 10s. 6d. Or separately: PART I. Mental Science, 6s. 6d. PART II. Moral Science, 4s. 6d.
- A Treatise on Human Nature; being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects. By David Hume. Edited, with Notes, &c. by T. H. Green, Fellow, and T. H. Grose, late Scholar, of Balliol College, Oxford. 2 vols. 8vo. [In the press.
  - Essays Moral, Political, and Literary. By DAVID HUME. By the same Editors. 2 vols. 8vo. [In the press.

## Astronomy, Meteorology, Popular Geography, &c.

- Outlines of Astronomy. By Sir J. F. W. Herschel, Bart. M.A Eleventh Edition, with 9 Plates and numerous Diagrams. Square crown 8vo. 12s.
- Essays on Astronomy. A Series of Papers on Planets and Meteors, the Sun and sun-surrounding Space, Stars and Star Cloudlets; and a Dissertation on the approaching Transit of Venus: preceded by a Sketch of the Life and Work of Sir J. Herschel. By R. A. Proctor, B.A. With 10 Plates and 24 Woodcuts. 8vo. price 12s.
- Schellen's Spectrum Analysis, in its Application to Terrestrial Substances and the Physical Constitution of the Heavenly Bodies. Translated by Jane and C. Lassell; edited, with Notes, by W. Huggins, LLD. F.R.S. With 13 Plates (6 coloured) and 223 Woodcuts. 8vo. 28s.
- The Sun; Ruler, Light, Fire, and Life of the Planetary System. By RICHARD A. PROCTOR, B.A. F.R.A.S. Second Edition; with 10 Plates (7 coloured) and 107 Woodcuts. Crown 8vo. price 14s.
- Saturn and its System. By R. A. Proctor, B.A. 8vo. with 14 Plates, 14s.

- Magnetism and Deviation of the Compass. For the use of Students in Navigation and Science Schools. By John Merrifield, LL.D. F.R.A.S. With Diagrams. 18mo. price 1s. 6d.
- Air and Rain; the Beginnings of a Chemical Climatology. By ROBERT ANGUS SMITH, Ph.D. F.R.S. F.C.S. Government Inspector of Alkali Works, with 8 Illustrations. 8vo. price 24s.
- The Star Depths; or, other Suns than Ours; a Treatise on Stars, Star-Systems, and Star-Cloudlets. By R. A. PROCTOR, B.A. Crown 8vo. with numerous Illustrations. [Nearly ready.
- The Orbs Around Us; a Series of Familiar Essays on the Moon and Planets, Meteors and Comets, the Sun and Coloured Pairs of Suns. By R. A. PROCTOR, B.A. Crown 8vo. price 7s. 6d.
- Other Worlds than Ours; the Plurality of Worlds Studied under the Light of Recent Scientific Researches. By R. A. PROCTOR, B.A. Third Edition, revised and corrected; with 14 Illustrations. Crown 8vo. 10s. 6d.

- Celestial Objects for Common Telescopes. By T. W. Webb, M.A. F.R.A.S. New Edition, revised, with Map of the Moon and Woodcuts. Crown 8vo. price 7s. 6d.
- A New Star Atlas, for the Library, the School, and the Observatory, in Twelve Circular Maps (with Two Index Plates) Intended as a Companion to 'Webb's Celestial Objects for Common Telescopes.' With a Letterpress Introduction on the Study of the Stars, illustrated by 9 Diagrams. By RICHARD A. PROCTOR, B.A. Hon. Sec. R.A.S. Crown 8vo. 5s.
- Maunder's Treasury of Geography, Physical, Historical, Descriptive, and Political. Edited by W. Hughes, F.R.G.S. With 7 Maps and 16 Plates. Fcp. 8vo. 6s.

- A General Dictionary of Geography, Descriptive, Physical, Statistical, and Historical; forming a complete Gazetteer of the World. By A. Keith Johnston, F.R.S.E. New Edition, thoroughly revised. [In the press.
- The Public Schools Atlas of Modern Geography. In Thirty-one Maps, exhibiting clearly the more important Physical Features of the Countries delineated, and Noting all the Chief Places of Historical, Commercial, and Social Interest. Edited, with an Introduction, by the Rev. G. BUTLER, M.A. Imperial quarto, price 3s. 6d. sewed; 5s. cloth.
- Nautical Surveying, an Introduction to the Practical and Theoretical Study of. By John Knox Laughton, M.A. F.R.A.S. Small 8vo. price 6s.

## Natural History and Popular Science.

- Popular Lectures on Scientific
  Subjects. By H. HELMHOLTZ, Professor of
  Physiology, formerly in the University of
  Heidelberg, and now in the University of
  Berlin, Foreign Member of the Royal
  Society of London. Translated by E.
  ATKINSON Ph.D. F.C.S Professor of Experimental Science, Staff College. With
  many Illustrative Wood Engravings. 8vo.
  price 12s. 6d.
- Introduction to Experimental Physics, Theoretical and Practical; including Directiens for Constructing Physical Apparatus and for Making Experiments. By A. F. Weinhold, Professor in the Royal Technical School at Chemnitz. Translated and edited (with the Author's sanction) by B. Loewy, F.R.A.S. With a Preface by G. C. Foster, F.R.S. Professor of Physics in University College, London. With numerous Wood Engravings. Svo. price 18s.
- Natural Philosophy for General Readers and Young Persons; a Course of Physics divested of Mathematical Formulæ and expressed in the language of daily life. Translated from Ganot's Cours de Physique, by E. Atkinson, Ph.D. F.C.S. Crown 8vo. with 404 Woodcuts, price 7s. 6d.
- Mrs. Marcet's Conversations on Natural Philosophy. Revised by the Author's Sox, and augmented by Conversations on Spectrum Analysis and Solar Chemistry. With 36 Plates. Crown 8vo. price 7s. 6d.

- Ganot's Elementary Treatise on Physics, Experimental and Applied, for the use of Colleges and Schools. Translated and Edited with the Author's sanction by E. Atkinson, Ph.D. F.C.S. New Edition, revised and enlarged; with a Coloured Plate and 726 Woodcuts. Post 8vo. 15s.
- Text-Books of Science, Mechanical and Physical. Edited by T. M. Goodeve, M.A. and C. W. Merriffeld, F.R.S. Small 8vo. price 3s. 6d. each:—
  - 1. Goodeve's Mechanism.
  - 2. BLOXAM'S Metals.
  - 3. MILLER'S Inorganic Chemistry.
  - 4. GRIFFIN'S Algebra and Trigonometry. GRIFFIN'S Notes and Solutions.
  - 5. Watson's Plane and Solid Geometry.
  - 6. MAXWELL'S Theory of Heat.
  - 7. MERRIFIELD'S Technical Arithmetic and Mensuration.
  - KEY, by the Rev. JOHN HUNTER, M.A.
  - 8. Anderson's Strength of Materials.
  - 9. Jenkin's Electricity and Magnetism.
- Dove's Law of Storms, considered in connexion with the ordinary Movements of the Atmosphere. Translated by R. H.; Scorr, M.A. T.C.D. 8vo. 10s. 6d.
- The Correlation of Physical
  Forces. By Sir W. R. Grove, Q.C. V.P.R.S
  Fifth Edition, revised, and Augmented by a
  Discourse on Continuity. 8vo. 10s. 6d
- Fragments of Science. By Joh TYNDALL, LL.D. F.R.S. Third Edition 8vo. price 143

- Heat a Mode of Motion. By John Tyndall, LL.D. F.R.S. Fourth Edition. Crown 8vo. with Woodcuts, price 10s. 6d.
- Sound; a Course of Eight Lectures delivered at the Royal Institution of Great Britain. By John Tyndall, LL.D. F.R.S. New Edition, with Portrait and Woodcuts. Crown 8vo. 9s.
- Researches on Diamagnetism and Magne-Crystallic Action; including the Question of Diamagnetic Polarity. By JOHN TYNDALL, LL.D. F.R.S. With 6 Plates and many Woodcuts. Svo. 14s.
- Principles of Animal Mechanics. By the Rev. Samuel Haughton, F.R.S. M.D. Dublin, D.C.L. Oxon. Fellow of Trinity College, Dublin. 8vo. price 21s.
- Lectures on Light, Delivered in America in 1872 and 1873. By JOHN TYNDALL, LL.D., F.R S. Professor of Natural Philosophy in the Royal Institution of Great Britain.

  [In the press.]
- Notes of a Course of Nine Lectures on Light, delivered at the Royal Institution, A.D. 1869. By J. TYNDALL, LL.D. F.R.S. Crown 8vo. 1s. sewed, or 1s. 6d. cloth.
- Notes of a Course of Seven Lectures on Electrical Phenomena and Theories, delivered at the Royal Institution, A.D. 1870.

  By John Tyndall, LL.D. F.R.S. Crown 8vo. 1s. sewed, or 1s. 6d. cloth.
- Light Science for Leisure Hours; a Series of Familiar Essays on Scientific Subjects, Natural Phenomena, &c. By R. A. PROCTOR, B.A. Second Edition, revised. Crown 8vo. price 7s. 6d.
- Light: its Influence on Life and Health. By Forbes Winslow, M.D. D.C.L. Oxon. (Hon.) Fep. 8vo. 6s.
- Professor Owen's Lectures on the Comparative Anatomy and Physiology of the Invertebrate Animals. Second Edition, with 235 Woodcuts. 8vo. 21s.
- The Comparative Anatomy and Physiology of the Vertebrate Animals. By RICHARD OWEN, F.R.S. D.C.L. With 1,472 Woodcuts. 3 vols. 8vo. £3 13s. 6d.
- Kirby and Spence's Introduction to Entomology, or Elements of the Natural History of Insects. Crown 8vo. 5s.
- Strange Dwellings; a Description of the Habitations of Animals, abridged from 'Homes without Hands.' By J. G. Wood, M.A. F.L.S. With a New Frontispiece and about 60 other Woodcut Illustrations. Crown 8vo. price 7s. 6d.

- Homes without Hands; a Description of the Habitations of Animals, classed according to their Principle of Construction.
  By Rev. J. G. Wood, M.A. F.L.S. With about 140 Vignettes on Wood. 8vo. 21s.
- The Harmonies of Nature and Unity of Creation. By Dr. G. Hartwig. 8vo. with numerous Illustrations, 18s.
- The Aerial World. By Dr. George Hartwig, Author of 'The Sea and its Living Wonders,' 'The Polar World,' &c. 8vo. with numerous Illustrations.

  [In the press.]
- The Sea and its Living Wonders.

  By the same Author. Third Edition, enlarged. 8vo. with many Illustrations, 21s.
- The Tropical World; a Popular Scientific Account of the Natural History of the Equatorial Regions. By the same Author. New Edition, with about 200 Illustrations. 8vo. price 10s. 6d.
- The Subterranean World. By the same Author. With 3 Maps and about 80 Woodcut Illustrations, including 8 full size of page. 8vo. price 21s.
- The Polar World: a Popular Description of Man and Nature in the Arctic and Antarctic Regions of the Globe. By the same Author. With 8 Chromoxylographs, 3 Maps, and 85 Woodcuts. 8vo. 21s.
- A Familiar History of Birds.

  By E. Stanley, D.D. late Lord Bishop of Norwich. Fep. with Woodcuts, 3s. 6d.
- Insects at Home; a Popular Account of British Insects, their Structure, Habits, and Transformations. By the Rev. J. G. Wood, M.A. F.L.S. With upwards of 700 Illustrations engraved on Wood. 8vo. price 21s.
- Insects Abroad; being a Popular Account of Foreign Insects, their Structure, Habits, and Transformations. By J. G. Wood, M.A. F.L.S. Author of 'Homes without Hands' &c. In One Volume, printed and 'illustrated uniformly with 'Insects at Home,' to which it will form a Sequel and Companion. [In the press.
- The Primitive Inhabitants of Scandinavia. Containing a Description of the Implements, Dwellings, Tombs, and Mode of Living of the Savages in the North of Europe during the Stone Age. By Sven Nilsson. 8vo. Plates and Woodcuts, 18s.
- The Origin of Civilisation, and the Primitive Condition of Man; Mental and Social Condition of Savages. By Sir JOHN LUBBOCK, Bart. M.P. F.R.S. Second Edition, with 25 Woodcuts. 8vo. 1 6s.

- An Exposition of Fallacies in the Hypothesis of Mr. Darwin. By C. R. Bree, M.D. F.Z.S. With 36 Woodcuts. Crown 8vo. price 14s.
- The Ancient Stone Implements, Weapons, and Ornaments, of Great Britain. By John Evans, F.R.S. F.S.A. 8vo. with 2 Plates and 476 Woodcuts, price 28s.
- Mankind, their Origin and Destiny. By an M.A. of Balliol College, Oxford. Containing a New Translation of the First Three Chapters of Genesis; a Critical Examination of the First Two Gospels; an Explanation of the Apocalypse; and the Origin and Secret Meaning of the Mythological and Mystical Teaching of the Ancients. With 31 Illustrations. 8vo. price 31s. 6d.
- Bible Animals; a Description of every Living Creature mentioned in the Scriptures, from the Ape to the Coral. By the Rev. J. G. Wood, M.A. F.L.S. With about 100 Vignettes on Wood. 8vo. 21s.
- Maunder's Treasury of Natural History, or Popular Dictionary of Zoology. Revised and corrected Edition. Fcp. 8vo. with 900 Woodcuts, price 6s.
- The Elements of Botany for Families and Schools. Tenth Edition, revised by Thomas Moore, F.L.S. Fep. with 154 Woodcuts, 2s. 6d.
- The Treasury of Botany, or Popular Dictionary of the Vegetable Kingdom; with which is incorporated a Glessary of Botanical Terms. Edited by J. Lindley, F.R.S. and T. Moore, F.L.S. Pp. 1,274, with 274 Woodcuts and 20 Steel Plates. Two Parts, fcp. 8vo. 12s.
- The Rose Amateur's Guide. By THOMAS RIVERS. The Tenth Edition, revised and improved. Fcp. 8vo. price 4s.

- A Dictionary of Science, Litera ture, and Art. Fourth Edition, re-edited by the late W. T. BRANDE (the Author) and George W. Cox, M.A. 3 vols. medium 8vo. price 63s. eloth.
- Maunder's Scientific and Literary Treasury; a Popular Encyclopædia of Science, Literature, and Art. New Edition, in part rewritten, with above 1,000 new articles, by J. Y. Johnson. Fcp. 6s.
- Loudon's Encyclopædia of Plants; comprising the Specific Character, Description, Culture, History, &c. of all the Plants found in Great Britain. With upwards of 12,000 Woodcuts. 8vo. 42s.
- Handbook of Hardy Trees, Shrubs, and Herbaceous Plants; containing Descriptions, Native Countries, &c. of a selection of the Best Species in Cultivation; together with Cultural Details, Comparative Hardiness, suitability for particular positions, &c. Based on the French Work of Messrs. Decaisne and Naudin, intitled 'Manuel de l'Amateur des Jardins,' and including 720 Woodcut Illustrations by Riocreux and Leblanc. By W.B. HEMSLEY, formerly Assistant at the Herbarium of the Royal Gardens, Kew. Medium 8vo. 21s.
- A General System of Descriptive and Analytical Botany: I. Organography, Anatomy, and Physiology of Plants; II. Iconography, or the Description and History of Natural Families. Translated from the French of E. Le Maout, M.D. and J. Decaisne, Member of the Institute, by Mrs. Hooker. Edited and arranged according to the Botanical System adopted in the Universities and Schools of Great Britain, by J. D. Hooker, M.D. &c. Director of the Royal Botanic Gardens, Kew. With 5,500 Woodcuts from Designs by L. Stenheil and A. Riocreux. Medium 8vo. price 52s. 6d.

Chemistry, Medicine, Surgery, and the Allied Sciences.

- A Dictionary of Chemistry and the Allied Branches of other Sciences. By HENRY WATTS, F.C.S. assisted by eminent Scientific and Practical Chemists. 5 vols. medium 8vo. price £7 3s.
- Supplement, Completing the Record of Discovery to the end of 1869. 8vo. 31s. 6d.
- Contributions to 'Molecular Physics in the domain of Radiant Heat; a Series of Memoirs published in the Philosophical Transactions, &c. By John Trndall, LLD. F.R.S. With 2 Plates and 31 Woodcuts. 8vo. price 16s.
- Elements of Chemistry, Theoretical and Practical. By WILLIAM A MILLER, M.D. LL.D. Professor of Chemistry, King's College, London. New Edition. 3 vols. 8vo. £3.

PART I. CHEMICAL PHYSICS, 15s. PART II. INORGANIC CHEMISTRY, 21s. PART III. ORGANIC CHEMISTRY' 24s.

A Course of Practical Chemistry, for the use of Medical Students. By W. Odling, M.B. F.R.S. New Edition, will 70 new Woodcuts. Crown 8vo. 7s. 6d.

- A Manual of Chemical Physiology, including its Points of Contact with Pathology. By J. L. W. Тнирисним, М.D. 8vo. with Woodcuts, price 7s. 6d.
- Select Methods in Chemical Analysis, chiefly Inorganic. By WILLIAM CROOKES, F.R.S. With 22 Woodcuts. Crown 8vo. price 12s. 6d.
- Chemical Notes for the Lecture Room. By Thomas Wood, F.C.S. 2 vols. crown 8vo. I. on Heat, &c. price 5s. II. on the Metals, price 5s.
- The Handbook for Midwives. By HENRY FLY SMITH, B.A. M.B. Oxon. M.R.C.S. Eng. late Assistant-Surgeon at the Hospital for Women, Soho Square. With 41 Woodcuts. Crown 8vo. price 5s.
- The Diagnosis, Pathology, and Treatment of Diseases of Women; including the Diagnosis of Pregnancy. By GRAILY HEWITT, M.D. &c. Third Edition, revised and for the most part re-written; with 132 Woodcuts. 8vo. 24s.
- Lectures on the Diseases of Infancy and Childhood. By CHARLES WEST, M.D. &c. Fifth Edition. 8vo. 16s.
- On Some Disorders of the Nervous System in Childhood. Being the Lumleian Lectures delivered before the Royal College of Physicians in March 1871 By Charles West, M.D. Crown 8vo. 5s
- On Chronic Bronchitis, especially as connected with Gout, Emphysema, and Diseases of the Heart. By E. Headlam Greenhow, M.D. F.R.S. Physician to and Lecturer on the Principles and Practice of Medicine at the Middlesex Hospital. 8vo. price 7s. 6d.
- On the Surgical Treatment of Children's Diseases. By T. Holmes, M.A. &c. late Surgeon to the Hospital for Sick Children. Second Edition, with 9 Plates and 112 Woodcuts. 8vo. 21s.
- Lectures on the Principles and Practice of Physic. By Sir Thomas Watson, Bart. M.D. Physician-in-Ordinary to the Queen. Fifth Edition, thoroughly revised. 2 vols. 8vo. price 36s.
- Lectures on Surgical Pathology. By Sir James Paget, Bart F.R.S. Third Edition, revised and re-edited by the Author and Professor W. Turner, M.B. 8vo. with 131 Woodcuts, 21s.

- Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New Edition, brought down to the present time. By S. A. Lane, Surgeon to St. Mary's Hospital, &c. assisted by various Eminent Surgeons. 2 vols. 8vo. price 25s. each.
- Pulmonary Consumption; its Nature, Varieties, and Treatment: with an Analysis of One Thousand Cases to exemplify its Duration. By C. J. B. WILLIAMS, M.D. F.R.S. and C. T. WILLIAMS, M.A. M.D. Oxon. Post 8vo. price 10s. 6d.
- The Climate of the South of France as suited to Invalids; with Notices of Mediterranean and other Winter Stations. By C. T. WILLIAMS, M.D. Physician to the Hospital for Consumption at Brompton. Second Edition, with an Appendix on Alpine Summer Quarters and the Mountain Cure, and a Map. Crown 8vo. price 6s.
- Anatomy, Descriptive and gical. By Henry Gray, F.R.S. With about 410 Woodcuts from Dissections. Sixth Edition, by T. Holmes, M.A. Cantab. With a New Introduction by the Editor. Royal 8vo. 28s.
- The House I Live in; or, Popular Illustrations of the Structure and Functions of the Human Body. Edited by T. G. Girtin. New Edition, with 25 Woodcuts. 16mo. price 2s. 6d.
- Quain's Elements of Anatomy. Seventh Edition [1867]. Edited by W. Sharpey, M.D. F.R.S. Professor of Anatomy and Physiology in University College, London; Allen Thomas, M.D. F.R.S. Professor of Anatomy in the University of Glasgow: and J. Cleland, M.D. Professor of Anatomy in Queen's College, Galway. With upwards of 800 Engravings on Wood. 2 vols. 8vo. price 31s. 6d.
- The Science and Art of Surgery; being a Treatise on Surgical Injuries, Diseases, and Operations. By John Eric Erichsen, Senior Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London. A New Edition, being the Sixth, revised and enlarged; with 712 Woodcuts. 2 vols. 8vo. price 32s.
- A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A. &c. Surgeon and Lecturer on Surgery at St. George's Hospital, and Surgeon-in-Chief to the Metropolitan Police. Second Edition, thoroughly revised, with numerous Illustrations. 5 vols. 8vo. £5 5s.

- A Treatise on the Continued Fevers of Great Britain. By CHARLES MURCHISON, M.D. New Edition, revised. [Nearly ready.
- Clinical Lectures on Diseases of the Liver, Jaundice, and Abdominal Dropsy. By CHARLES MURCHISON, M.D. Physician to the Middlesex Hospital. Post 8vo. with 25 Woodcuts, 10s. 6d.
- Copland's Dictionary of Practical Medicine, abridged from the larger work, and throughout brought down to the present state of Medical Science. 8vo. 36s.
- Outlines of Physiology, Human and Comparative. By John Marshall, F.R.C.S. Surgeon to the University College Hospital. 2 vols. crown 8vo. with 122 Woodcuts, 32s.

- Dr. Pereira's Elements of Materia Medica and Therapeutics, abridged and adapted for the use of Medical and Pharmaceutical Practitioners and Students. Edited by Professor Bextley, F.L.S. &c. and by Dr. Redwood, F.C.S. &c. With 125 Woodcut Illustrations. 8vo. price 25s.
- The Essentials of Materia Medica and Therapeutics. By Alfred Baring Garrod, M.D. F.R.S. &c. Physician to King's College Hospital. Third Edition, Sixth Impression, brought up to 1870. Crown 8vo. price 12s. 6d.
- Todd and Bowman's Physiological Anatomy and Physiology of Man. With numerous Illustrations. Vol. II. 8vo. price 25s.

Vol. I. New Edition by Dr. LIONEL S. BEALE, F.R.S. in course of publication, with numerous Illustrations. Parts I. and II. price 7s. 6d. each.

#### The Fine Arts, and Illustrated Editions.

- Grotesque Animals, invented, described, and portrayed by E. W. COOKE, R.A. F.R.S. F.GS. F.Z.S. in 24 Plates, with Elucidatory Comments. Royal 4to. 21s.
- In Fairyland; Pictures from the Elf-World. By RICHARD DOYLE. With a Poem by W. Allingham. With 16 coloured Plates, containing 36 Designs. Folio, 31s. 6d.
- Albert Durer, his Life and Works; including Autobiographical Papers and Complete Catalogues. By WILLIAM B. Scott. With Six Etchings by the Author and other Illustrations. 8vo. 16s.
- Half-Hour Lectures on the History and Practice of the Fine and Ornamental Arts. By. W. B. Scott. Second Edition. Crown 8vo. with 50 Woodcut Illustrations, 8s. 6d.
- The Chorale Book for England: the Hymns Translated by Miss C. WINK-WORTH; the Tunes arranged by Prof. W. S. BENNETT and OTTO GOLDSCHMIDT. Fcp. 4to. 12s. 6d.
- The New Testament, illustrated with Wood Engravings after the Early Masters, chiefly of the Italian School. Crown 4to. 63s. cloth, gilt top; or £5 5s. morocco.
- The Life of Man Symbolised by the Months of the Year in their Seasons and Phases. Text selected by RICHARD PIGOT. 25 Illustrations on Wood from Original Designs by JOHN LEIGHTON, F.S.A. Quarto, 42s.

- Cats and Farlie's Moral Emblems; with Aphorisms, Adages, and Proverbs of all Nations: comprising 121 Illustrations on Wood by J. Leighton, F.S.A. with an appropriate Text by R. Pigor. Imperial 8vo. 31s. 6d.
- Sacred and Legendary Art. By Mrs. Jameson. 6 vols. square crown 8vo. price £5 15s. 6d. as follows:—
- Legends of the Saints and Martyrs. New Edition, with 19 Etchings and 187 Woodcuts. 2 vols. price 31s. 6d.
- Legends of the Monastic Orders. New Edition, with 11 Etchings and 88 Woodcuts. 1 vol. price 21s.
- Legends of the Madonna. New Edition, with 27 Etchings and 165 Woodcuts. 1 vol. price 21s.
- The History of Our Lord, with that of His Types and Precursors. Completed by Lady EASTLAKE. Revised Edition, with 13 Etchings and 281 Woodcuts. 2 vols. price 42s.
- Lyra Germanica, the Christian Year. Translated by CATHERINE WINKWORTH, with 125 Illustrations on Wood drawn by J. LEIGHTON, F.S.A. Quarto, 21s.
- Lyra Germanica, the Christian Life. Translated by CATHERINE WINKWORTH; with about 200 Woodcut Illustrations by J. Leighton, F.S.A. and other Artists. Quarto, 21s.

## The Useful Arts, Manufactures, &c.

- Gwilt's Encyclopædia of Architecture, with above 1,600 Woodcuts. Fifth Edition, with Alterations and considerable Additions, by WYATT PAPWORTH. 8vo. price 52s. 6d.
- A Manual of Architecture: being a Concise History and Explanation of the principal Styles of European Architecture, Ancient, Mediæval, and Renaissance; with their Chief Variations and a Glossary of Technical Terms. By Thomas Mitchell. With 150 Woodcuts. Crown 8vo. 10s. 6d.
- History of the Gothic Revival; an Attempt to shew how far the taste for Medieval Architecture was retained in England during the last two centuries, and has been re-developed in the present. By C. L. EASTLAKE, Architect. With 48 Illustrations (36 full size of page). Imperial 8vo. price 31s. 6d.
- Hints on Household Taste in Furniture, Upholstery, and other Details. By Charles L. Eastlake, Architect. New Edition, with about 90 Illustrations. Square crown 8vo. 14s.
- a Description of the New Geometric Chuck constructed by Mr. Plant of Birmingham, with Directions for its use, and a Series of Patterns cut by it; with Explanations of the mode of producing them, and an Account of a New Process of Deep Cutting and of Graving on Copper. By H. S. SAVORY. With 571 Woodcut Illustrations. Square crown 8vo. price 21s.
- Lathes and Turning, Simple, Mechanical, and Ornamental. By W. HENRY NORTHCOTT. With about 240 Illustrations on Steel and Wood. 8vo. 18s.
- Perspective; or, the Art of Drawing what one Sees. Explained and adapted to the use of those Sketching from Nature. By Lieut. W. H. Collins, R.E. F.R.A.S. With 37 Woodcuts. Crown 8vo. price 5s.
- Principles of Mechanism, designed for the use of Students in the Universities, and for Engineering Students generally. By R. WILLIS, M.A. F.R.S. &c. Jacksonian Professor in the Univ. of Cambridge. Second Edition; with 374 Woodcuts. 8vo. 18s.
- Handbook of Practical Telegraphy. By R. S. Culley, Memb. Inst. C.E. Engineer-in-Chief of Telegraphs to the Post-Office. Fifth Edition, revised and enlarged; with 118 Woodcuts and 9 Plates. 8vo. price 14s.

- Ure's Dictionary of Arts, Manufactures, and Mines. Sixth Edition, rewritten and greatly enlarged by ROBERT HUNT, F.R.S. assisted by numerous Contributors. With 2,000 Woodcuts. 3 vols. medium 8vo. £4 14s. 6d.
- Encyclopædia of Civil Engineering, Historical, Theoretical, and Practical. By E. Cresy, C.E. With above 3,000 Woodcuts. 8vo. 42s.
- Catechism of the Steam Engine, in its various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture. By John Bourne, C.E. New Edition, with 89 Woodcuts. Fcp. 8vo. 6s.
- Handbook of the Steam Engine.

  By JOHN BOURNE, C.E. forming a KEY to
  the Author's Catechism of the Steam Engine.
  With 67 Woodcuts. Fep. 8vo. price 9s.
- Recent Improvements in the Steam Engine. By John Bourne, C.E. New Edition, including many New Examples, with 124 Woodcuts. Fcp. 8vo. 6s.
- A Treatise on the Steam Engine, in its various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture. By J. BOURNE, C.E. New Edition; with Portrait, 37 Plates, and 546 Woodcuts. 4to. 42s.
- Treatise on Mills and Millwork. By Sir W. FAIRBAIRN, Bart. F.R.S. New Edition, with 18 Plates and 322 Woodcuts. 2 vols. 8vo. 32s.
- Useful Information for Engineers. By the same Author. First, Second, and Third Series, with many Plates and Woodcuts. 3 vols. crown 8vo. 10s. 6d. each.
- The Application of Cast and Wrought Iron to Building Purposes. By the same Author. Fourth Edition, with 6 Plates and 118 Woodcuts. 8vo. 16s.
- The Strains in Trusses Computed by means of Diagrams; with 20 Examples drawn to Scale. By F. A. RANKEN, M.A. C.E. Lecturer at the Hartley Institution, Southampton. With 35 Diagrams. Square erown 8vo. price 6s. 6d.
- Mitchell's Manual of Practical
  Assaying. New Edition, being the Fourth,
  thoroughly revised, with the recent Discoveries incorporated. By W. CROOKES,
  F.R.S. With numerous Woodcuts. 8vo.

Nearly ready.

- Bayldon's Art of Valuing Rents and Tillages, and Claims of Tenants upon Quitting Farms, both at Michaelmas and Lady-Day. Eighth Edition, revised by J. C. MORTON. 8vo. 10s. 6d.
- On the Manufacture of Beet-Root Sugar in England and Ireland. By WILLIAM CROOKES, F.R.S. With 11 Woodcuts. 8vo. 8s. 6d.
- Loudon's Encyclopædia of Gardening: comprising the Theory and Practice of Horticulture, Floriculture, Arboriculture, and Landscape Gardening. With 1,000 Woodcuts. 8vo. 21s.
- Practical Treatise on Metallurgy, adapted from the last German Edition of Professor Kerl's Metallurgy by W. CROOKES, F.R.S. &c. and E. RÖHRIG, Ph.D. M.E. 3 vols. 8vo. with 625 Woodcuts, price 4l. 19s.
- Loudon's Encyclopædia of Agriculture: comprising the Laying-out, Improvement, and Management of Landed Property, and the Cultivation and Economy of the Productions of Agriculture. With 1,100 Woodcuts. 8vo. 21s.

## Religious and Moral Works.

- The Speaker's Bible Commentary, by Bishops and other Clergy of the Anglican Church, critically examined by the Right Rev. J. W. COLENSO, D.D. Bishop of Natal. 8vo. Part I, Genesis, 3s. 6d. Part II. Exodus, 4s. 6d. Part III. Leviticus, 2s. 6d. Part IV. Numbers, 3s. 6d. Part V. Deuteronomy, 5s.
- The Outlines of the Christian Ministry Delineated, and brought to the Test of Reason, Holy Scripture, History, and Experience. By Christopher Wordsworth, D.C.L. &c. Bishop of St. Andrew's. Crown 8vo. price 7s. 6d.
- Christian Counsels, selected from the Devotional Works of Fénélon, Archbishop of Cambrai. Translated by A. M. JAMES. Crown 8vo. price 5s.
- Eight Essays on Ecclesiastical Reform. By various Writers; with Preface and Analysis of the Essays. Edited by the Rev. Orby Shipley, M.A. Crown 8vo. 10s. 6d.
- Authority and Conscience; a Free Debate on the Tendency of Dogmatic Theology and on the Characteristics of Faith. Edited by CONWAY MOREL. Post 8vo. 7s. 6d.
- Reasons of Faith; or, the Order of the Christian Argument Developed and Explained. By the Rev. G. S. Drew, M.A. Second Edition, revised and enlarged. Fcp. 8vo. 6s.
- Christ the Consoler; a Book of Comfort for the Sick. With a Preface by the Right Rev. the Lord Bishop of Carlisle. Small 8vo. 6s.
- The True Doctrine of the Eucharist. By Thomas S. L. Vogan, D.D. Canon and Prebendary of Chichester and Rural Dean. vo. 18s.

- The Student's Compendium of the Book of Common Prayer; being Notes Historical and Explanatory of the Liturgy of the Church of England. By the Rev. H. ALLDEN NASH. Fep. 8vo. price 2s. 6d.
- Synonyms of the Old Testament, their Bearing on Christian Faith and Practice. By the Rev. ROBERT B. GIRDLESTONE, M.A. 8vo. price 15s.
- Fundamentals; or, Bases of Belief concerning Man and God: a Handbook of Mental, Moral, and Religious Philosophy. By the Rev. T. GRIFFITH, M.A. 8vo. price 10s. 6d.
- An Introduction to the Theology of the Church of England, in an Exposition of the Thirty-nine Articles. By the Rev. T. P. BOULTBEE, LL.D. Fcp. 8vo. price 6s.
- Christian Sacerdotalism, viewed from a Layman's standpoint or tried by Holy Scripture and the Early Fathers; with a short Sketch of the State of the Church from the end of the Third to the Reformation in the beginning of the Sixteenth Century. By John Jardine, M.A. LL.D. 8vo. 8s. 6d.
- Prayers for the Family and for Private Use, selected from the Collection of the late Baron Bunsen, and Translated by Catherine Winkworth. Fcp. 8vo. price 3s. 6d.
- Churches and their Creeds. By the Rev. Sir Philip Perring, Bart. late Scholar of Trin. Coll. Cambridge, and University Medallist. Crown 8vo. 10s.
- The Problem of the World and the Church Reconsidered, in Three Letters to a Friend. By a SEPTUAGENARIAN. Second Edition, revised and edited by JAMES BOOTH, C.B. Crown 8vo. price 5s.

- An Exposition of the 39 Articles, Historical and Doctrinal. By E. HAROLD BROWNE, D.D. Lord Bishop of Ely. Ninth Edition. 8vo. 16s.
- The Voyage and Shipwreck of St. Paul; with Dissertations on the Ships and Navigation of the Ancients. By James Smith, F.R.S. Crown 8vo. Charts, 10s. 6d.
- The Life and Epistles of St. Paul. By the Rev. W. J. CONYBEARE, M.A. and the Very Rev. J. S. Howson, D.D. Dean of Chester. Three Editions:—

LIBRARY EDITION, with all the Original Illustrations, Maps, Landscapes on Steel, Woodcuts, &c. 2 vols. 4to. 48s.

INTERMEDIATE EDITION, with a Selection of Maps, Plates, and Woodcuts. 2 vols. square crown 8vo. 21s.

STUDENT'S EDITION, revised and condensed, with 46 Illustrations and Maps. 1 vol. crown 8vo. 9s.

- Evidence of the Truth of the Christian Religion derived from the Literal Fulfilment of Prophecy. By ALEXADER KEITH, D.D. 40th Edition, with numerous Plates, in square 8vo. 12s. 6d.; also the 39th Edition, in post 8vo. with 5 Plates, 6s.
- The History and Destiny of the World and of the Church, according to Scripture. By the same Author. Square 8vo. with 40 Illustrations, 10s.
- The History and Literature of the Israelites, according to the Old Testament and the Apocrypha. By C. DE ROTHSCHILD and A. DE ROTHSCHILD. Second Edition. 2 vols. crown 8vo. 12s. 6d. Abridged Edition, in 1 vol. fcp. 8vo. 3s. 6d.
- Ewald's History of Israel to the Death of Moses. Translated from the German. Edited, with a Preface and an Appendix, by Russell Martineau, M.A. Second Edition. 2 vols. 8vo. 24s. Vols. III. and IV. edited by J. E. Carpenter, M.A. price 21s.
- England and Christendom. By Archbishop Manning, D.D. Post 8vo. price 10s 6d.
- Ignatius Loyola and the Early Jesuits. By Stewart Rose New Edition, revised. 8vo. with Portrait, 16s.
- An Introduction to the Study of the New Testament, Critical, Exegetical, and Theological. By the Rev. S. Davidson, D.D. LL.D. 2 vols. 8vo. 30s.

- Commentary on the Epistle to the Romans. By the Rev. W.A. O'CONNOR, B.A. Crown 8vo. price 3s. 6d.
- The Epistle to the Hebrews; With Analytical Introduction and Notes. By the Rev. W. A. O'CONNOR, B.A. Crown 8vo. price 4s. 6d.
- A Critical and Grammatical Commentary on St. Paul's Epistles. By C. J. Ellicott, D.D. Lord Bishop of Gloucester and Bristol. 8vo.
- Galatians, Fourth Edition, 8s. 6d. Ephesians, Fourth Edition, 8s. 6d.
- Pastoral Epistles, Fourth Edition, 10s. 6d. Philippians, Colossians, and Philemon, Third Edition, 10s. 6d.
- Thessalonians, Third Edition, 7s. 6d.
- Historical Lectures on the Life of Our Lord Jesus Christ: being the Hulsean Lectures for 1859. By C. J. Ellicott, D.D. Fifth Edition. 8vo. 12s.
  - The Greek Testament; with Notes, Grammatical and Exegetical. By the Rev. W. Webster, M.A. and the Rev. W. F. Wilkinson, M.A. 2 vols. 8vo. £2. 4s.
  - The Treasury of Bible Know-ledge; being a Dictionary of the Books, Persons, Places, Events, and other Matters of which mention is made in Holy Scripture. By Rev. J. Ayre, M.A. With Maps, 15 Plates, and numerous Woodcuts. Fcp. 8vo. price 6s.
  - Every-day Scripture Difficulties explained and illustrated. By J. E. PRESCOTT, M.A. I. Matthew and Mark; II. Luke and John. 2 vols. 8vo. price 9s. each.
  - The Pentateuch and Book of Joshua Critically Examined. By the Right Rev. J. W. COLENSO, D.D. Lord Bishop of Natal. Crown 8vo. price 6s.
- PART V. Genesis Analysed and Separated, and the Ages of its Writers determined 8vo. 18s.
- PART VI. The Later Legislation of the Pentateuch. 8vo. 24s.
- The Formation of Christendom.

  By T. W. Allies. Parts I. and II. 8vo.

  price 12s. each.
- Four Discourses of Chrysostom, chiefly on the parable of the Rich Man and Lazarus. Translated by F. Allen, B.A. Crown 8vo. 3s. 6d.
- Thoughts for the Age. By ELIZABETH M. SEWELL, Author of 'Amy Herbert.' New Edition. Fep. 8vo. price 5s.
- Passing Thoughts on Religion, By Miss Sewell. Fep. 3s. 6d.

- Self-examination before Confirmation. By Miss Sewell. 32mo. 1s. 6d.
- Thoughts for the Holy Week, for Young Persons. By Miss Sewell. New Edition. Fcp. 8vo. 2s.
- Readings for a Month Preparatory to Confirmation, from Writers of the Early and English Church. By Miss Sewell. Fcp. 8vo. 4s.
- Readings for Every Day in Lent, compiled from the Writings of Bishop JEREMY TAYLOR. By Miss SEWELL. Fep. 5s.
- Preparation for the Holy Communion; the Devotions chiefly from the works of JEREMY TAYLOR. By Miss SEWELL. 32mo. 3s.
- Bishop Jeremy Taylor's Entire
  Works; with Life by BISHOP HEBER.
  Revised and corrected by the Rev. C. P
  EDEN. 10 vols. 8vo. price £5. 5s.

- Traditions and Customs of Cathedrals. By MACKENZIE E. C. WALCOTT, B.D. F.S.A. Precentor and Prebendary of Chichester. Second Edition, revised and enlarged. Crown, 8vo. price 6s.
- Spiritual Songs for the Sundays and Holidays throughout the Year. By J. S. B. Monsell, Ll.D. Vicar of Egham and Rural Dean. Fourth Edition, Sixth Thousand. Fcp. price 4s. 6d.
- Lyra Germanica, translated from the German by Miss C. WINKWORTH. FIRST SERIES, the *Christian Year*, Hymns for the Sundays and Chief Festivals of the Church; SECOND SERIES, the *Christian Life*. Fcp. 8vo. price 3s. 6d. each SERIES.
- Endeavours after the Christian Life; Discourses. By James Martineau. Fourth Edition. Post 8vo. price 7s. 6d.

## Travels, Voyages, &c.

- Rambles, by Patricius Walker. Reprinted from Fraser's Magazine; with a Vignette of the Queen's Bower, in the New Forest. Crown 8vo. price 10s. 6d.
- Slave-Catching in the Indian Ocean; a Record of Naval Experiences. By Capt. Colomb, R.N. 8vo. with Illustrations from Photographs, &c. price 21s.
- The Cruise of H.M.S. Curagoa among the South Sea Islands in 1865. By JULIUS BRENCHLEY, M.A. F.R.G.S. 8vo. with Map and Plates. [Nearly ready.
- Six Months in California. By J.G. PLAYER-FROWD. Post 8vo. price 6s.
- The Japanese in America. By Charles Lanman, American Secretary, Japanese Legation, Washington, U.S.A. Post 8vo. price 10s. 6d.
- My Wife and I in Queensland; Eight Years' Experience in the Colony, with some account of Polynesian Labour. By Charles H. Eden. With Map and Freutispiece. Crown 8vo. price 9s.
- Untrodden Peaks and Unfrequented Valleys; a Midsummer Ramble among the Dolomites. By AMELIA B. EDWARDS, Author of 'Barbara's History'; &c. With a Map, and numerous Illustrations from Designs by the Author; Engraved on Wood by E. Whymper. Medium 8vo. uniform with Whymper's 'Scrambles in the Alps.'

  [Nearly ready.

- How to See Norway. By Captain J. R. CAMPBELL. With Map and 5 Woodcuts. Fep. 8vo. price 5s.
- Pau and the Pyrenees. By Count HENRY RUSSELL, Member of the Alpine Club. With 2 Maps. Fep. 8vo. price 5s.
- Hours of Exercise in the Alps. By Join Tyndall, Ll.D., F.R.S. Third Edition, with Seven Woodcuts by E. Whymper. Crown 8vo. price 12s. 6d.
- Cadore or Titian's Country. By Josiah Gilbert, one of the Authors of the 'Dolomite Mountains.' With Map, Facsimile, and 40 Illustrations. Imp. 8vo. 31s. 6d.
- The Dolomite Mountains. Excursions through Tyrol, Carinthia, Carniola, and Friuli. By J. GILBERT and G. C. CHURCHILL, F.R.G.S. With numerous Illustrations. Square crown 8vo. 21s.
- Travels in the Central Caucasus and Bashan, including Visits to Ararat and Tabreez and Ascents of Kazbek and Elbruz. By DOUGLAS W. FRESHFIELD. Square crown 8vo. with Maps, &c., 18s.
- Life in India; a Series of Sketches shewing something of the Anglo-Indian, the Land he lives in, and the People among whom he lives. By EDWARD BRADDON. Post 8yo, price 9s.

C

- The Alpine Club Map of the Chain of Mont Blanc, from an actual Survey in 1863—1864. By A. Adams-Reilly, F.R.G.S. M.A.C. In Chromolithography on extra stout drawing paper 28in. x 17in. price 10s. or mounted on canvas in a folding case, 12s. 6d.
- History of Discovery in our Australasian Colonies, Australia, Tasmania, and New Zealand, from the Earliest Date to the Present Day. By WILLIAM HOWITT. 2 vols. 8vo. with 3 Maps, 20s.
- Visits to Remarkable Places:
  Old Halls, Battle-Fields, and Scencs illustrative of striking Passages in English
  History and Poetry. By the same Author.
  2 vols. square crown 8vo. with Wood Engravings, 25s.
- The Rural Life of England.

  By WILLIAM HOWITT. Woodcuts by
  Bewick and Williams. Medium 8vo. 12s. 6d.

- Guide to the Pyrenees, for the use of Mountaineers. By CHARLES PACKE. Second Edition, with Maps, &c. and Appendix. Crown 8vo. 7s. 6d.
- The Alpine Guide. By John Ball M.R.I.A. late President of the Alpine Club. Post 8vo. with Maps and other Illustrations.
- The Guide to the Eastern Alps,
- The Guide to the Western Alps, including Mont Blanc, Monte Rosa, Zermatt, &c. Price 6s. 6d.
- Guide to the Central Alps, including all the Oberland District, price 7s. 6d.
- Introduction on Alpine Travelling in general, and on the Geology of the Alps, price 1s. Either of the Three Volumes or Parts of the Alpine Guide may be had with this Introduction prefixed, price 1s. extra.

#### Works of Fiction.

- The Burgomaster's Family; or, Weal and Woe in a Little World. By Christine Müller. Translated from the Dutch by Sir J. Shaw Lefevre, K.C.B. F.R.S. Crown 8vo. price 6s.
- Popular Romances of the Middle Ages. By the Rev. George W. Cox, M.A. and Eustage Hinton Jones. Crown 8vo. 10s. 6d.
- Tales of the Teutonic Lands; a Sequel to 'Popular Romances of the Middle Ages.' By GEORGE W. COX, M.A. and EUSTACE HINTON JONES. Crown 8vo. price 10s. 6d.
- Novels and Tales. By the Right Hon. Benjamin Disraeli, M.P. Cabinet Editions, complete in Ten Volumes, crown 8vo. price 6s. each, as follows:—

LOTHAIR, 6s. CONINGSBY, 6s. SYBIL, 6s. TANCRED, 6s. VENETIA, 6s. ALROY, IXION, &c. 6s. YOUNG DUKE, &c. 6s. VIVIAN GREY, 6s.

CONTARINI FLEMING, &c. 6s. HENRIETTA TEMPLE, 6s.

Cabinet Edition, in crown 8vo. of Stories and Tales by Miss SEWELL:— AMY HERBERT, 2s. 6d. | KATHARINE ASHTON,

GERTRUDE, 2s. 6d. EARL'S DAUGHTER,

2s. 6d. EXPERIENCE of LIFE, 2s. 6d.

CLEVE HALL, 2s. 6d. Ivors, 2s. 6d. AATHARINE ASHTON 2s. 6d. MARGARET PERCI-VAL, 3s. 6d. LANETON PARSON-AGE, 3s. 6d. URSULA, 3s. 6d.

- Becker's Gallus; or, Roman Scenes of the Time of Augustus. Post 8vo. 7s. 6d.
- Becker's Charicles: Illustrative of Private Life of the Ancient Greeks. Post 8vo. 7s. 6d.
- Tales of Ancient Greece. By the Rev. G. W. Cox, M.A. late Scholar of Trin. Coll. Oxford. Crown 8vo. price 6s. 6d.
- Wonderful Stories from Norway, Sweden, and Iceland. Adapted and arranged by Julia Goddard. With an Introductory Essay by the Rev. G. W. Cox, M.A. and Six Illustrations. Square post 8vo. 6s.
- The Modern Novelist's Library: Melville's Digby Grand, 2s. boards; 2s. 6d. cloth.
- cloth. GLADIATORS, 2s. boards; 2s. 6d.
- 2s. 6d. cloth.
- Holmby House, 2s. boards; 2s. 6d. cloth. Interpreter, 2s. boards; 2s. 6d.
- cloth. KATE COVENTRY, 2s. boards;
- 2s. 6d. cloth.

  Queen's Maries, 2s. boards;
- 2s. 6d. cloth.

  General Bounce, 2s. boards;
- 2s. 6d. cloth. Trollope's Warden 1s. 6d. boards; 2s
- Eloth.

  BARCHESTER TOWERS, 2s. boards;
  2s. 6d. cloth.
- Bramley-Moore's Six Sisters of the Valleys, 2s. boards; 2s. 6d. cloth.

## Poetry and The Drama.

- Ballads and Lyrics of Old France; with other Poems. By A. Lang, Fellow of Merton College, Oxford. Square fcp. 8vo. price 5s.
- Moore's Lalla Rookh, Tenniel's Edition, with 68 Wood Engravings from Original Drawings. Fep. 4to. 21s.
- Moore's Irish Melodies, Maclise's Edition, with 161 Steel Plates from Original Drawings. Super-royal 8vo. 31s. 6d.
- Miniature Edition of Moore's Irish Melodies, with Maclise's Illustrations (as above), reduced in Lithography. Imp. 16mo. 10s. 6d.
- Lays of Ancient Rome; with Ivry and the Armada. By the Right Hon. LORD MACAULAY. 16mo. 3s. 6d.
- Lord Macaulay's Lays of Ancient Rome. With 90 Illustrations on Wood, Original and from the Antique, from Drawings by G. Scharf. Fep. 4to. 21s.
- Miniature Edition of Lord Macaulay's Lays of Ancient Rome, with Scharf's Illustrations (as above) reduced in Lithography. Imp. 16mo. 10s. 6d.
- Southey's Poetical Works, with the Author's last Corrections and Copyright Additions. Library Edition. Medium 8vo. with Portrait and Vignette, 14s.

- Goldsmith's Poetical Works, Illustrated with Wood Engravings from Designs by Members of the ETCHING CLUB. Imp. 16mo. 7s. 6d.
- Poems. By JEAN INGELOW. 2 vols. Fcp. 8vo. price 10s.
  - FIRST SERIES, containing 'DIVIDED,
    'The STAR'S MONUMENT,' &c. Six-'
    teenth Thousand. Fep. 8vo. price 5s.
    SECOND SERIES, 'A STORY of DOOM,'
    'GLADYS and her ISLAND,' &c. Fifth
    Thousand. Fep. 8vo. price 5s.
- Poems by Jean Ingelow. First Series, with nearly 100 Illustrations engraved on Wood. Fep. 4to. 21s.
- Bowdler's Family Shakspeare cheaper Genuine Edition, complete in 1 vol. large type, with 36 Woodcut Illustrations, price 14s. or in 6 pocket vols. 3s. 6d. each.
- Horatii Opera, Library Edition, with Copious English Notes, Marginal References and Various Readings. Edited by the Rev. J. E. YONGE, M.A. 8vo. 21s.
- The Odes and Epodes of Horace; a Metrical Translation into English, with Introduction and Commentaries. By Lord LYTTON. Post 8vo. price 10s. 6d.
- The Æneid of Virgil Translated into English Verse. By the late J. CONINGTON, M.A. New Edition. Crown 8vo. 9s.

#### Rural Sports &c.

- Encyclopædia of Rural Sports; a Complete Account, Historical, Practical, and Descriptive, of Hunting, Shooting, Fishing, Racing, &c. By D. P. BLAINE. With above 600 Woodcuts (20 from Designs by John Leech). 8vo. 21s.
- The Dead Shot, or Sportsman's Complete Guide; a Treatise on the Use of the Gun, Dog-breaking, Pigeon-shooting, &c. By MARKSMAN. Fcp. 8vo. with Plates, 5s.
- A Book on Angling: being a Complete Treatise on the Art of Angling in every branch, including full Illustrated Lists of Salmon Flies. By Francis Francis. New Edition, with Portrait and 15 other Plates, plain and coloured. Post 8vo. 15s.
- Wilcocks's Sea-Fisherman: comprising the Chief Methods of Hook and Line Fishing in the British and other Seas, a glance at Nets, and remarks on Boats and Boating. Second Edition, enlarged, with 80 Woodcuts. Post 8vo. 12s. 6d.

- The Fly-Fisher's Entomology. By Alfred Ronalds. With coloured Representations of the Natural and Artificial Insect. Sixth Edition, with 20 coloured Plates. 8vo. 14s.
- The Ox, his Diseases and their Treatment; with an Essay on Parturition in the Cow. By J. R. Dobson, M.R.C.V.S. Crown 8vo. with Illustrations, 7s. 6d.
- A Treatise on Horse-shoeing and Lameness. By Joseph Gamgee, Veterinary Surgeon, formerly Lecturer on the Principles and Practice of Farriery in the New Veterinary College, Edinburgh. 8vo. with 55 Woodcuts, 15s.
- Blaine's Veterinary Art: a Treatise on the Anatomy, Physiology, and Curative Treatment of the Diseases of the Horse, Neat Cattle, and Sheep. Seventh Edition, revised and enlarged by C. STEEL. 8vo. with Plates and Woodcuts, 18s.

- Youatt on the Horse. Revised and enlarged by W. Watson, M.R.C.V.S. 8vo. with numerous Woodcuts, 12s. 6d.
- Youatt on the Dog. By the same Author. 8vo. with numerous Woodcuts price 6s.
- Horses and Stables. By Colonel F. Fitzwygram, XV. the King's Hussars. With 24 Plates of Woodcut Illustrations, containing very numerous Figures. 8vo. 15s.
- The Dog in Health and Disease. By STONEHENGE. With 73 Wood Engravings. New Edition, revised. Square crown 8vo. price 7s. 6d.
- The Greyhound. By the same Author. Revised Edition, with 24 Portraits of Greyhounds. Square crown 8vo. 10s. 6d

- Stables and Stable Fittings. By W.Miles, Esq. Imp. 8vo. with 13 Plates, 15s.
- The Horse's Foot, and how to keep it Sound. By W. Miles, Esq. Ninth Edition, with Illustrations. Imp. 8vo. 12s. 6d.
- A Plain Treatise on Horse-shoeing. By the same Author. Sixth Edition, post 8vo. with Illustrations, 2s. 6d.
- Remarks on Horses' Teeth, addressed to Purchasers. By the same. Post 8vo. 1s. 6d.
- The Setter; with Notices of the most Eminent Breeds now extant, Instructions how to Breed, Rear, and Break; Dog Shows, Field Trials, and General Management, &c. By EDWARD LAYERACK. With 2 Portraits of Setters. Crown 4to. 7s. 6d.

## Works of Utility and General Information.

- Chess Openings. By F. W. Longman, Balliol College, Oxford. Fcp. 8vo. 2s. 6d.
- The Theory of the Modern Scientific Game of Whist. By WILLIAM POLE, F.R.S. Mus. Doc. Oxon. Fifth Edition, enlarged. Fcp. 8vo. price 2s. 6d.
- A Practical Treatise on Brewing; with Formulæ for Public Brewers, and Instructions for Private Families. By W BLACK. Fifth Edition. 8vo. 10s. 6d.
- The Theory and Practice of Banking. By Henry Dunning MacLeon, M.A. Barrister-at-Law. Second Edition. entirely remodelled. 2 vols. 8vo. 30s.
- Collieries and Colliers: a Handbook of the Law and Leading Cases relating thereto. By J. C. FOWLER, Barrister. Third Edition. Fcp. 8vo. 7s. 6d.
- Modern Cookery for Private Families, reduced to a System of Easy Practice in a Series of carefully-tested Receipts. By ELIZA ACTON. Newly revised and enlarged; with 8 Plates, Figures, and 150 Woodcuts. Fep. 6s.
- Maunder's Treasury of Knowledge and Library of Reference: comprising an English Dictionary and Grammar, Universal Gazetteer, Classical Dictionary, Chronology, Law Dictionary, Synopsis of the Peerage, Useful Tables, &c. Fcp. 8vo. 6s.
- Pewtner's Comprehensive Specifier; a Guide to the Practical Specification of every kind of Building-Artificer's Work: with Forms of Building Conditions and Agreements, an Appendix, Foot-Notes, and Index. Edited by W. Young, Architect. Crown 8vo. 6s.
- M'Culloch's Dictionary, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation. New Edition, revised throughout and corrected to the Present Time; with a Biographical Notice of the Author. Edited by H. G. Reid. 8vo. price 63s.

- Hints to Mothers on the Management of their Health during the Period of Pregnancy and in the Lying-in Room. By Thomas Bull, M.D. Fcp. 8vo. price 5s.
- The Maternal Management of Children in Health and Disease. By Thomas Bull, M.D. Fcp. 8vo. price 5s.
- How to Nurse Sick Children; containing Directions which may be found of service to all who have charge of the Young. By CHARLES WEST, M.D. Second Edition. Fep. 8vo. 1s. 6d
- Notes on Lying-In Institutions; with a Proposal for Organising an Institution for Training Midwives and Midwifery Nurses. By FLORENCE NIGHTINGALE. With 5 Plans. Square crown 8vo.7s.6d.
- Blackstone Economised; being a Compendium of the Laws of England to the Present Time. By D. M. Ahd, of the Middle Temple, Barrister-at-Law. Post 8vo.7s. 6d.
- The Cabinet Lawyer; a Popular Digest of the Laws of England, Civil, Criminal, and Constitutional. Twenty-third Edition, corrected and brought up to the Present Date. Fcp. 8vo. price 7s. 6d.
- A Profitable Book upon Domestic Law. Essays for English Women and Law Students. By Perkins, Junior, M.A. Barrister-at-Law. Post 8vo. price 10s. 6d.
- A History and Explanation of the Stamp Duties; containing Remarks on the Origin of the Stamp Duties and a History of the Stamp Duties in this Country from their Commencement to the Present Time. By Stephen Dowell, M.A. Assistant-Solicitor of Inland Revenue. 8vo. price 12s. 6d.
- Willich's Popular Tables for Ascertaining the Value of Lifehold, Leasehold, and Church Property, Renewal Fines, &c. with numerous useful Chemical, Geographical, Astronomical, Trigonometrical Tables, &c. Post 8vo. 10s.

## INDEX.

ACTON'S Modern Cookery	20 .	Burton's Christian Church	0
AIRD's Blackstone Economised	20	BURIOS S Christian Church	3
Allies on Formation of Christendom	16	Cabinet Lawyer	20
		Campbell's Norway	17
ALLEN'S Discourses of Chrysostom	16	CATES'S Biographical Dictionary	4
Alpine Guide (The)	18	- and Woodward's Encyclopædia	2
Amos's Jurisprudence	5		
Anderson's Strength of Materials	9	CATS and FARLIE'S Moral Emblems	13
ARNOLD'S Manual of English Literature	6	Changed Aspects of Unchanged Truths	7
Authority and Conscience	15	CHESNEY'S Indian Polity	2
Autumn Holidays of a Country Parson	7	Waterloo Campaign	2
AYRE'S Treasury of Bible Knowledge	16	Chorale Book for England	13
•		Christ the Consoler	15
		CLOUGH'S Lives from Plutarch	2
BACON'S Essays by WHATELY	5	Codrington's (Admiral) Memoirs	4
- Life and Letters, by SPEDDING	4	Colenso on Pentateuch and Book of Joshua	16
Works	5	The Speaker's Bible Commen-	
BAIN'S Mental and Moral Science	8	tary	15
on the Senses and Intellect	8	Collins's Perspective	14
	- 1	Colomb's Slave Catching in the Indian	T.E
BALL's Guide to the Central Alps	18		17
Guide to the Western Alps	18	Ocean	17
Guide to the Eastern Alps	18	Commonplace Philosopher in Town and	_
BAYLDON'S Reuts and Tillages	15	Country, by A. K. H. B.	7
BECKER'S Charicles and Gallus	18	Conington's Translation of Virgil's Æneid	19
BENFEY'S Sanskrit-English Dictionary	6	Miscellaneous Writings	7
BLACK'S Treatise on Brewing	20	CONTANSEAU'S Two French Dictionaries	6
BLACKLEY'S German-English Dictionary	6	CONYBEARE and Howson's Life and Epistles	
BLAINE'S Rural Sports	19	of St. Paul	16
	19	COOKE'S Grotesque Animals	13
BLOXAM'S Metals	9	COOPER'S Surgical Dictionary	12
BOOTH'S Problem of the World and the		COPLAND'S Dictionary of Practical Medicine	13
Church	15	COTTON'S Memoir and Correspondence	4
Saint-Simon	3	Counsel and Comfort from a City Pulpit	7
BOULTBEE on 39 Articles	15	Cox's (G. W.) Aryan Mythology	3
BOURNE'S Catechism of the Steam Engine		History of Greece	2
Handbook of Steam Engine	14	Tale of the Great Persian War	2
Transition on the Steam Engine	14	Tales of Ancient Greece	18
Treatise on the Steam Engine Improvements in the same BOWDLER'S Family SHAKSPEARE	14	and Jones's Romances	18
Improvements in the same	14	Teutonic Tales.	
	19		18
BRADDON'S Life in India	17	CREASY on British Constitution	2
BRAMLEY-MOORE'S Six Sisters of the Valley	18	CRESY'S Encyclopædia of Civil Engineering	14
BRANDE'S Dictionary of Science, Literature,		Critical Essays of a Country Parson	7
and Art	11	CROOKES on Beet-Root Sugar	15
BRAY'S Manual of Anthropology	8	's Chemical Analysis	12
Philosophy of Necessity	8	Culley's Handbook of Telegraphy	14
On Force	8	Cusack's Student's History of Ireland	2
Bree's Fallacies of Darwinism	11		
BRENCHLEY'S Cruise of the 'Curaçoa'	17	DAVIDSON'S Introduction to New Testament	16
BROWNE'S Exposition of the 39 Articles	16	Dead Shot (The), by MARKSMAN	19
BRUNEL'S Life of BRUNEL	4	DE CAISNE and LE MAOUT'S Botany	11
BUCKLE'S History of Civilisation	2	DE MORGAN'S Paradexes	7
Posthumous Remains	7	DENISON'S Vice-Regal Life	1
Bull's Hints to Mothers		DISRAELI'S Lord George Bentinck	4
Maternal Management of Children	20	Novels and Tales	13
Bunsen's God in History	20	Dorson on the Ox	19
Denous Browns	3	Dove's Law of Storms	9
Prayers	15	DOWELL on Stamp Duties	20
Burgomaster's Family (The)	:8	DOYLE'S Fairyland	13
BURKE'S Rise of Great Families	5	DREW'S Reasons of Faith	
Vicissitudes of Families	ົ້ ເ	DREWS IN 850115 OF PARTIE	15

EASTLAKE'S Gothic Revival	14	HEWITT on the Diseases of Women	12
Hints on Household Taste	14	Hodgson's Time and Space	8
EATON'S Musical Criticism and Biography	4	Theory of Practice	8
EDEN'S Queensland	17	HOLLAND'S Recollections	4
EDWARDS'S Rambles among the Dolomites	17	Holmes's Surgical Treatment of Children	12
Elements of Botany	ii	System of Surgery	12
ELLICOTT'S Commentary on Ephesians	16		
Coletions	16	Howitt's Australian Discovery	18
Galatians Pastoral Epist. Philippians,&c.	16	Rural Life of England	18
Tastoral Epist.	16	Visits to Remarkable Places	18
Philippians,&c. Thessalonians		HÜBNER'S Pope Sixtus the Fifth	4
	16	Humboldt's Life	4
"s Lectures on Life of Christ	16	Hume's Essays	8
ERICHSEN'S Surgery	12	Treatise on Human Nature	8
EVANS'S Ancient Stone Implements	11		
EWALD'S History of Israel	16		
		IHNE'S History of Rome	3
		Ingelow's Poems	19
FAIRBAIRN'S Application of Cast and			
Wrought Iron to Building	14		
Information for Engineers	14	James's Christian Counsels	15
	14	Jameson's Legends of Saints and Martyrs	13
FARADAY'S Life and Letters	4	Legends of the Madonna	13
FITZWYGRAM on Horses and Stables	20	- Legends of the Monastic Orders	13
FOWLER'S Collieries and Colliers	20	Legends of the Saviour	13
Francis's Fishing Book	19	Jamieson on Causality	6
FRESHFIELD'S Travels in the Caucasus	17	JARDINE'S Christian Sacerdotalism	15
FROUDE'S English in Ireland	1	Johnston's Geographical Dictionary	9
History of England	1		
Short Studies	7		
		Kalisch's Commentary on the Bible	6
		KEITH on Destiny of the World	16
GAMGEE on Horse-Shoeing	19	Fulfilment of Prophecy	16
GANOT'S Elementary Physics	9	KENYON'S (Lord) Life	4
Natural Philosophy	9	KERL'S Metallurgy, by CEOOKES and	
GARROD'S Materia Medica	13	Röhrig	15
GILBERT'S Cadore	17	KIRBY and SPENCE'S Entomology	10
and Churchill's Dolomites	17		
GIRDLESTONE'S Bible Synonyms	15		
GIRTIN'S House I Live In	12	LANG'S Ballads and Lyrics	19
GLEDSTONE'S Life of WHITEFIELD	4	Lanman's Japanese in America	17
GODDARD'S Wonderful Stories	18	LATHAM'S English Dictionary	6
GOLDSMITH'S Poems, Illustrated	19	LAUGHTON'S Nautical Surveying'	9
Goodeve's Mechanism	9	LAVERACK'S Setters	20
GRAHAM'S Autobiography of MILTON	4	LECKY'S History of European Morals	3
View of Literature and Art	2		3
GRANT'S Ethics of Aristotle	5	Leaders of Public Opinion	4
Graver Thoughts of a Country Parson	7	Leisure Hours in Town, by A. K. H. B	7
Gray's Anatomy	12	Lessons of Middle Age, by A. K. H. B	7
GREENHOW on Bronchitis	12	LEWES'S Biographical History of Philosophy	3
GRIFFIN'S Algebra and Trigonometry	9	LIDDELL & SCOTT'S Greek-English Lexicons	6
GRIFFITH'S Fundamentals	15	Life of Man Symbolised	13
GROVE on Correlation of Physical Forces	9	LINDLEY and MOORE'S Treasury of Botany	11
GURNEY'S Chapters of French History	2	LONGMAN'S Edward the Third	2
GWILT'S Encyclopædia of Architecture	14	Lectures on History of England	
• • • • • • • • • • • • • • • • • • • •			20
		Loudon's Encyclopædia of Agriculture	15
HARE on Election of Representatives	7	Gardening	15 11
HARTWIG'S Aeriel World	10	LUBBOCK'S Origin of Civilisation	
Harmonies of Nature	10	Lytton's Odes of Horace	19
Polar World	10	Lyra Germanica	
	10	Ligra Germanica	, 1,
Sea and its Living wonders  Subterranean World	10	,	
Tropical World	10	MACAULAY'S (Lord) Essays	3
HATHERTON'S Memoir and Correspondence	2	History of England	1
HAUGHTON'S Animal Mechanics	10	Lays of Ancient Rome	
HAYWARD'S Biographical and Critical Essays	4		7
Helmholtz's Scientific Lectures	9	Speeches	6
HEMSLEY'S Trees, Shrubs, and Herbaceous			1
Pants	11	MACLEOD'S Principles of Economical Philo-	
HERSCHEL'S Outlines of Astronomy	8	sophy	ŧ
	-		

MACLEOD'S Dictionary of Political Economy 5	ODLING's Course of Practical Chemistry	11
Theory and Practice of Banking 20 McCulloch's Dictionary of Commerce 20	OWEN'S Comparative Anatomy and Physio-	
Mankind, their Origin and Destiny 11	logy of Vertebrate Animals  Lectures on the Invertebrata	10 10
MANNING'S England and Christendom 16	Decemes on the invertebrata	10
MARCET'S Natural Philosophy 9		
MARSHALL'S Physiology         13           MARSHMAN'S History of India         2           Life of Havelock	PACKE'S Guide to the Pyrenees	18
MARSHMAN'S History of India 2	PAGET'S Lectures on Surgical Pathology	12
Life of Havelock	PEREIRA'S Elements of Materia Medica	13
MARTINEAU'S Endeavours after the Chris-	PERKIN'S Profitable Book on Domestic Law	20
tian Life	PERRING'S Churches and Creeds	15
MATHEWS on Colonial Question 2	PEWTNER'S Comprehensive Specifier PLAYER-FROWD'S California	20 17
MAUNDER'S Biographical Treasury 5	Pole's Game of Whist	20
Geographical Treasury 9	PRENDERGAST'S Mastery of Languages	6
Historical Treasury 3	PRESCOTT'S Scripture Difficulties	16
Scientific and Literary Treasury 11	Present-Day Thoughts, by A. K. H. B	7
Treasury of Knowledge 20	PROCTOR'S Astromomical Essays	8
Treasury of Natural History 11	Orbs around Us	8
MAXWELL'S Theory of Heat	Plurality of Worlds	8
MELVILLE'S Digby Grand	Saturn Scientific Essays	10
——————————————————————————————————————	Star Atlas	9
Gladiators	Star Depths	8
Good for Nothing 18	Sun	8
Holmby House 18	Public Schools Atlas	9
Interpreter 18		
Kate Coventry 18		
Queen's Maries 18	QUAIN'S Anatomy	12
MENDELSSOHN'S Letters 4 MERIVALE'S Fall of the Roman Republic 2		
	RANKEN on Strains in Trusses	14
MERRIFIELD'S Arithmetic and Mensuration 9	RAWLINSON'S Parthia	2
Magnetism 8	Recreations of a Country Parson, by	
MILES on Horse's Foot and Horse Shoeing. 20	A. K. H. B	7
on Horses' Teeth and Stables 20	REEVE'S Royal and Republican France	2
MILL (J.) on the Mind 5	REICHEL'S See of Rome	14
MILL (J. S.) on Liberty 5 Subjection of Women 5	REILLY'S Map of Mont Blanc	18 6
Subjection of Women 5 on Representative Government 5	RIVERS'S Rose Amateur's Guide	11
on Utilitarianism 5	Rogers's Eclipse of Faith	7
——'s Dissertations and Discussions 5	Defence of Eclipse of Faith	7
Political Economy 5	Roger's Thesaurus of English Words and	
System of Logic 5	Phrases	6
Hamilton's Philosophy 5	RONALDS'S Fly-Fisher's Entomology	19
MILLER'S Elements of Chemistry 11  ———————————————————————————	Rose's Loyola	16 16
———— Inorganic Chemistry 9 MITCHELL'S Manual of Architecture 14	RUSSELL'S Pau and the Pyrenees	17
Manual of Assaying 14	RUSSELL (Earl) on the Rise and Progress of	1,
Monsell's 'Spiritual Songs'	the Christian Religion	3
MOORE'S Irish Melodies, illustrated 19		_
Lalla Rookh, illustrated 19		
Morell's Elements of Psychology 7	SANDARS'S Justinian's Institutes	5
Mental Philosophy 7	SANFORD'S English Kings	1
Mossman's Christian Church	SAVORY'S Geometric Turning	14
MÜLLER'S Chips from a German Workshop 7 ————————————————————————————————————	SCHELLEN'S Spectrum Analysis	8
Science of Language 6 Science of Religion* 3	SCOTT'S Lectures on the Fine Arts	13 13
MURCHISON on Liver Complaints 13	Albert Durer Seaside Musing, by A. K. H. B.	7
on Continued Fevers 13	SEEBOHM'S Oxford Reformers of 1498	2
	SEWELL'S History of the Early Church	3
NASH'S Compendium of the Prayer-Book 15	Passing Thoughts on Religion	16
New Testament Illustrated with Wood En-	Preparation for Communion	17
gravings from the Old Masters 13		17
NEWMAN'S Apologia pro Vitá Suá 5	Readings for Lent	17
NIGHTINGALE on Lying-In Institutions 20	Examination for Confirmation	17
NILSSON'S Scandinavia 10	Stories and Tales	18 16
NORTHCOTT on Lathes and Turning 14	Thoughts for the Age Thoughts for the Holy Week	16
O'CONNOR'S Commentary on Hebrews 16	SHIPLEY'S Essays on Ecclesiastical Reform	
Romans 16	SHORT'S Church History	3
	-	

SMITH'S Paul's Voyage and Shipwreck	16	URE's Dictionary of Arts, Manufactures, and	
(SYDNEY) Life and Letters	4	Mines	14
Miscellaneous Works	7	*	
Miscellaneous Works Wit and Wisdom	7		
—— (Dr. Hy.) Handbook for Midwives	12	Vogan's Doctrine of the Euchrist	15
(Dr. R. A.) Air and Rain	8	TOTAL S DOCUME OF THE ENGINEST	10
Dr. R. A.) Air and Rain	6		
SOUTHEY'S Doctor		777	
Poetical Works	19	WALCOTT'S Traditions of Cathedrals	17
STANLEY': History of British Birds	10	WALKER'S (PATRICIUS) Rambles	17
STEPHEN'S Ecclesiastical Biography	4	Watson's Geometry	9
STIRLING'S Philosophy of Law	7	Principles and Practice of Physic	12
STIRLING'S PHILOSOPHY Of Law	8	Watts's Dictionary of Chemistry	11
ProtoplasmSecret of HegelSir WILLIAM HAMILTON	7	Webb's Objects for Common Telescopes	9
Secret of riegel	8	WEBSTER & WILKINSON'S Greek Testament	16
SIF WILLIAM HAMILION	1	WEINHOLD'S Experimental Physics	9
STOCKMAR'S Memoirs	20	WELLINGTON'S Life, by GLEIG	4
STONEHENGE on the Dog		West on Children's Diseases	12
on the Greyhound	20	on Children's Nervous Disorders	12
STRICKLAND'S Queens of England	5	on Nursing Sick Children	20
STUART GLENNIE'S Morningland	7	Whately's English Synonymes	5
Sunday Afternoons at the Parish Church of		Logic	5
a University City, by A. K. H. B	7		5
		WHITE and RIDDLE'S Latin Dictionaries	6
		WILCOCKS'S Sea Fisherman	
			19
TAYLOR'S History of India	2	WILLIAMS'S Aristotle's Ethics	5
(Jeremy) Works, edited by EDEN	17	WILLIAMS on Climate	12
Text-Books of Science	9	WILLICH'S Popular Tables	12
THIRLWALL'S History of Greece	2		20
THOMSON'S Laws of Thought	5	WILLIS'S Principles of Mechanism	14
THOMSON S Laws of Thought	12	Winslow on Light	10
THUDICHUM'S Chemical Physiology	1	Wood's (J. G.) Bible Animals	11
FODD (A.) on Parliamentary Government	-	Homes without Hands	10
and Bowman's Anatomy and Physiology of Man		Insects at Home	10
siology of Man	13	Insects Abroad	10
TRENCH'S Realities of Irish Life	2	Strange Dwellings	10
TROLLOPE'S Barchester Towers	18	——— (T.) Chemical Notes	12
Warden	18	WORDSWORTH'S Christian Ministry	15
TYNDALL'S American Lectures on Light	10		
Diamagnetism	10		
——— Faraday as a Discoverer	4	Yonge's History of England	1
Fragments of Science	9	English-Greek Lexicous	6
Hours of Exercise in the Alps	17	Horace	19
Lectures on Electricity	10	- English Literature	6
Lectures on Electricity Lectures on Light	10	— Modern History	3
Lectures on Sound	10	YOUATT on the Dog	20
	10	on the Horse	20
——— Molecular Physics	11	on the norse	20
niolecular i nysics	11		
		Zeller's Socrates	3
T A Topio	8	- Stoics, Epicureans, and Sceptics	3
UEBERWEG'S System of Logic	0 ,	Stores, Epicarcano, and Scopelost	



# THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

#### AN INITIAL FINE OF 25 CENTS

WILL BE ASSESSED FOR FAILURE TO RETURN THIS BOOK ON THE DATE DUE. THE PENALTY WILL INCREASE TO 50 CENTS ON THE FOURTH DAY AND TO \$1.00 ON THE SEVENTH DAY OVERDUE.

COT 10 1983	





